

## PUBLIC NOTICE

Hubbell-Lenoir City, Inc. has applied to the Tennessee Division of Air Pollution Control (TDAPC) for a construction permit for modification of a polymer concrete products manufacturing facility subject to the provisions of part 1200-03-09-.01(1)(h) of the Tennessee Comprehensive Rules and Regulations, and for a renewal of the facility's major source operating permit subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Comprehensive Rules and Regulations (also frequently referred to as Title V regulations) and for a construction permit to modify certain existing conditions applicable to their polymer concrete products manufacturing facility subject to the provisions of part 1200-03-09-.01(1)(h) of the Tennessee Air Pollution Control Regulations. A major source (Title V) operating permit is required by both the Federal Clean Air Act and the Tennessee Air Pollution Control Regulations. There would be no physical construction, and it should be noted that the facility has a current operating permit.

The applicant is Hubbell-Lenoir City, Inc. with a site address of 2911 Industrial Park Drive, Lenoir City, TN 37771. They seek to obtain an air contaminant construction permit (Division identification number: 53-0090/(974647) for modification of their polymer concrete products manufacturing facility, and renewal of the facility's major source operating (Part 70) permit. The construction permit and Title V renewal permit maintain the same existing limitations on emission rates from Sources 53-0090-02 and 53-0090-03, while changing the basis for some of the limitations from 1200-03-31-.04(1) to 1200-03-07-.07(2). There will be no emissions increase from these sources. Emissions limitations that had a basis from 1200-03-31-.04(1) in Sources 53-0090-02 and 53-0090-03 prior to the promulgation of 40 CFR Part 63, Subpart WWWW, are not subject to any applicable requirements from the promulgated rule, however, those emissions limitations will remain in the permit for these sources, with the basis for the limitations changing from 1200-03-31-.04(1) to 1200-03-07-.07(2) as described above.

EPA has agreed to treat the draft Part 70 permit as a proposed Part 70 permit and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division that comments have been received and resolved. Whether EPA's 45-day review period is performed concurrently with the public comment period or after the public comment period has ended, the deadline for citizen's petitions to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended (i.e., sequentially).

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <http://www2.epa.gov/caa-permitting/caa-permitting-epas-southeastern-region>

A copy of the application materials used by the TAPCD and a copy of the draft part 70 permit are available for public inspection during normal business hours at the following locations:

Lenoir City Public Library  
109 East Broadway  
Lenoir City, TN 37771

Tennessee Department of Environment and Conservation  
Division of Air Pollution Control  
William R. Snodgrass Tennessee Tower, 15th Floor  
312 Rosa L. Parks Avenue  
Nashville, TN 37243

Also, if you require copies of the draft/proposed permits they are available electronically by accessing the Air Pollution Control Public Participation Opportunity (APC PPO) page:

<https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-air.html>

Interested parties are invited to review these materials and comment. In addition, a public hearing about the part 70 permit may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be made within thirty (30) days of the date of this notice and should be addressed to **Michelle Walker Owenby, Director, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 15<sup>th</sup> Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243**. Questions concerning the source(s) may be addressed to Mr. Hernan Flores at the same address or by calling (615)-532-0593 or emailing to [Hernan.Flores@tn.gov](mailto:Hernan.Flores@tn.gov). A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to participate should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, W.R. Snodgrass Tenn. Tower, 2<sup>nd</sup> Floor, 312 Rosa L. Parks Ave., Nashville, TN 37243, 1-866-253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.

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(Do not publish text below the dotted line)

For the Loudon County “*News Herald*” -- published once during the time period of August 26, 2018, through September 1, 2018

Air Pollution Control

DATE: August 8, 2018

Assigned to –Hernan Flores

**No alterations to the above are allowed:**

**Hubbell-Lenoir City, Inc. must pay to place this advertisement in the newspaper.**

Air Pollution Control must be furnished with an affidavit from the newspaper stating that the ad was run and the date of the ad or one complete sheet from the newspaper showing this advertisement, the name of the newspaper and the date of publication. Mail to Hernan Flores, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 15th Floor, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243 or send a pdf copy of this information electronically to [air.pollution.control@tn.gov](mailto:air.pollution.control@tn.gov).

## **TITLE V PERMIT STATEMENT**

<b>Facility Name:</b>	Hubbell-Lenoir City, Inc.
<b>City:</b>	Lenoir City
<b>County:</b>	Loudon

<b>Date Application Received:</b>	June 2, 2016
<b>Date Application Deemed Complete:</b>	June 2, 2016

<b>Emission Source Reference No.:</b>	53-0090
<b>Permit No.:</b>	571704

### **INTRODUCTION**

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Hubbell-Lenoir City, Inc. and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

#### **Acronyms**

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

GHG - Greenhouse Gases

## I. Identification Information

### A. Installation Description:

- 01 – Aggregate Truck Unloading Products
- 02 – Continuous Mixers and Aggregate Transfer
- 03 – Batch Mixing and Casting
- 04 – Gel Coat Booth

### B. Facility Classification

1. Attainment or Non-Attainment Area Location

Area is designated as non-attainment area for ozone and PM<sub>2.5</sub>, and an attainment area for all other criteria pollutants.

2. Company is located in a Class II area.

### C. Regulatory Status

1. PSD/NSR

This facility *is not* a major source under PSD.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	yes		yes
PM <sub>10</sub>	yes		yes
SO <sub>2</sub>	no		yes
VOC	yes	yes	
NO <sub>x</sub>	no		yes
CO	no		yes
Individual HAP	yes	yes	
Total HAPs	yes	yes	
GHGs	no		yes

3. MACT Standards

This facility *is* a major source for HAPs. This facility *is* subject to a proposed or final MACT Standard.

List MACT Rule(s) if applicable:

40 CFR Part 63, Subpart WWWW

Conditions E6-5 (source 53-0090-02) and E7-3 (source 53-0090-03) of the new permit were included on previous permits as “hollow permit” conditions that were

made prior to promulgation of 40 CFR Part 60, Subpart WWWW. The promulgated 40 CFR Part 60, Subpart WWWW does not include any requirements that would apply to sources 53-0090-02 and 53-0090-03; the requirements in Conditions E6-5 and E7-3 are now based on TAPCR 1200-03-07-.07(2).

4. Program Applicability

Are the following programs applicable to the facility?

PSD (*no*)

NESHAP (*yes*)

NSPS (*no*)

**II. Compliance Information**

**A. Compliance Status**

Is the facility currently in compliance with all applicable requirements? *yes*

Are there any applicable requirements that will become effective during the permit term? *no*

**III. Other Requirements**

**A. Emissions Trading**

The facility is not involved in an emission trading program.

**B. Acid Rain Requirements**

This facility is not subject to any requirements in Title IV of the Clean Air Act.

**C. Prevention of Accidental Releases**

(Not Applicable)

**IV. Public Participation Procedures**

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA, Region 4
2. Knoxville County Dept. of Air Quality Management
3. North Carolina Dept. of Environment & Natural Resources
4. Eastern Band of Cherokee Indians

**V. Permitting Activities Since Issuance of Permit 563297**

None

STATE OF TENNESSEE  
AIR POLLUTION CONTROL BOARD  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243



**OPERATING PERMIT (TITLE V)** Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

**Date Issued:**

**Permit Number:**

**Date Expires:**

571704

**Issued To:**

Hubbell-Lenoir City, Inc.

**Installation Address:**

2911 Industrial Park Drive  
Lenoir City

**Installation Description:**

- 01 – Aggregate Truck Unloading (S-78)
- 02 – Continuous Mixers and Aggregate Transfer (S-53, -62, -63, -64)
- 03 – Batch Mixing and Casting (S-1 thru S-51)
- 04 – Gel Coat Booth (S-56)

**Facility ID:** 53-0090

**Renewal Application Due Date:**

Between \*\*\*\*\* and \*\*\*\*\*

**Primary SIC:** 87

**Information Relied Upon:**

Renewal Applications dated June 1, 2016 and April 10, 2017

(continued on the next page)

\_\_\_\_\_  
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**POST AT INSTALLATION ADDRESS**

3/8/2018

RDA-1298

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## SECTION A

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### GENERAL PERMIT CONDITIONS

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A permit issued under the provisions of Tennessee Comprehensive Rules and Regulations (Tenn. Comp. R. & Regs.) Paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR<sup>1</sup>, Part 70.

- A1. Definitions.** Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

Tenn. Comp. R. & Regs. Division 1200-03

- A2. Compliance requirement.** All terms and conditions in a permit issued pursuant to Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act. The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(e)2(i) and item 1200-03-09-.02(11)(e)1(vi)(I)

- A3. Need to halt or reduce activity.** The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(e)1(vi)(II)

- A4. The permit.** The permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(e)1(vi)(III)

- A5. Property rights.** The permit does not convey any property rights of any sort, or any exclusive privilege.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(e)1(vi)(IV)

- A6. Submittal of requested information.** The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(e)1(vi)(V)

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<sup>1</sup> CFR = Code of Federal Regulations

- A7. Severability clause.** The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

Tenn. Comp. R. & Regs. subpart 1200-03-09.02(11)(e)1(v)

**A8. Fee payment.**

(a) The permittee shall pay an annual Title V emission fee based upon the responsible official's choice of actual emissions, allowable emissions, or a combination of actual and allowable emissions; and on the responsible official's choice of annual accounting period. An emission cap of 4,000 tons per year per regulated pollutant per source SIC Code shall apply to actual or allowable based emission fees. A Title V annual emission fee will not be charged for emissions in excess of the cap. Title V annual emission fees will not be charged for carbon monoxide or for greenhouse gas pollutants solely because they are greenhouse gases.

(b) New Title V sources shall pay allowable based emission fees until the beginning of the next annual accounting period following receipt of their initial Title V operating permit. Thenceforth, the permittee shall pay their Title V fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees. Once permitted, the Responsible Official may revise their existing fee choice by submitting a written request to the Division no later than December 31 of the annual accounting period for which the fee is due. If a source does not declare an annual accounting period or fee basis the default annual accounting period is a calendar year and the default fee basis is the allowable emissions basis.

(c) When paying annual Title V emission fees, the permittee shall comply with all provisions of Tenn. Comp. R. & Regs. Rule 1200-03-26-.02 and Paragraph 1200-03-09-.02(11) applicable to such fees.

1. Major stationary sources choosing to pay annual emission fees on an allowable emissions basis shall pay one hundred percent (100%) of the fee due:

(i) No later than March 31 of the year immediately following the annual accounting period for which the fee is due for major stationary sources paying on a calendar year basis pursuant to subparagraph (b) of this paragraph; or

(ii) No later than March 31 of the current fiscal year for major stationary sources paying on a fiscal year basis.

2. Major stationary sources choosing to pay annual emission fees on an actual emissions basis or a combination of actual and allowable emissions basis, and on a calendar year basis, shall pay one hundred percent (100%) of the fee due no later than April 1 of the year immediately following the annual accounting period for which the fee is due, except as allowed by part 3 of Tenn. Comp. R. & Regs. subparagraph 1200-03-26-.02(9)(g).

3. Major stationary sources choosing to pay annual emission fees on an actual emissions basis or a combination of actual and allowable emissions basis and on a fiscal year basis shall pay an estimated sixty-five percent (65%) of the fee due pursuant to subparagraph (d) of Tenn. Comp. R. & Regs. paragraph 1200-03-26-.02(9) no later than April 1 of the current fiscal year. The remainder of the annual emission fee is due July 1 of each year, except as allowed by part 3 of Tenn. Comp. R. & Regs. subparagraph 1200-03-26-.02(9)(g).

(d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Sources subject to the provisions of Tenn. Comp. R. & Regs. Paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.

1. Sources that are subject to federally promulgated hazardous air pollutant under 40 CFR 60, 61, or 63 will place such regulated emissions in the regulated hazardous air pollutant (HAP) category.

2. A category of miscellaneous HAPs shall be used for hazardous air pollutants listed at Tenn. Comp. R. & Regs. part 1200-03-26-.02(2)(i)12 that are not subject to federally promulgated hazardous air pollutant standards under 40 CFR 60, 61, or 63.

3. HAPs that are also in the family of volatile organic compounds, particulate matter, or PM<sub>10</sub> shall not be placed in either the regulated HAP category or miscellaneous HAP category.

4. Sources that are subject to a provision of Tenn. Comp. R. & Regs. Chapter 1200-03-16 New Source Performance Standards (NSPS), Tenn. Comp. R. & Regs. 0400-30-39 Standards of Performance for New Stationary Sources, or 40 CFR 60 for pollutants that are neither particulate matter, PM<sub>10</sub>, sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), or hazardous air pollutants (HAPs) will place such regulated emissions in an NSPS pollutant category.

5. The regulated HAP category, the miscellaneous HAP category, and the NSPS pollutant category are each subject to the 4,000 ton cap provisions of Tenn. Comp. R. & Regs. subpart 1200-03-26-.02(2)(i).

6. Sources that wish to pay annual emission fees for PM<sub>10</sub> on an allowable emission basis may do so if they have a specific PM<sub>10</sub> allowable emission standard. If a source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM<sub>10</sub> emission basis, it may do so if the PM<sub>10</sub> actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM<sub>10</sub> emission levels must be made as part of the source's Title V operating permit in advance in order to exercise this option. The PM<sub>10</sub>

emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of Tenn. Comp. R. & Regs. subpart 1200-03-26-.02(2)(i) shall also apply to PM<sub>10</sub> emissions.

Tenn. Comp. R. & Regs. Rule 1200-03-26-.02 and subpart 1200-03-09-.02(11)(e)1(vii)

- A9. Permit revision not required.** A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(e)1(viii)

- A10. Inspection and entry.** Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or an authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:

- (a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by the Clean Air Act and Tenn. Comp. R. & Regs. Chapter 1200-03-10, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Clean Air Act, Tenn. Comp. R. & Regs. Division 1200-03, or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(e)3.(ii)

- A11. Permit shield.**

- (a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:
  1. Such applicable requirements are included and are specifically identified in the permit; or
  2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- (b) Nothing in this permit shall alter or affect the following:
  1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A.<sup>2</sup> §68-201-109 (emergency orders) including the authority of the Governor under the section;
  2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or
  4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.
- (c) Permit shield is granted to the permittee.

Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)6

- A12. Permit renewal and expiration.**

- (a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.
- (b) Provided that the permittee submits a timely and complete application for permit renewal the source will not be considered to be operating without a permit until the Technical Secretary takes final action on the permit application, except as otherwise noted in Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.02(11).
- (c) This permit, its shield provided in Condition **A11**, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

<sup>2</sup> T.C.A. = Tennessee Code Annotated

Tenn. Comp. R. & Regs. parts 1200-03-09-.02(11)(f)2 and 3, item 1200-03-09-.02(11)(d)1(i)(III), and part 1200-03-09-.02(11)(a)2

**A13. Reopening for cause.**

(a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:

1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(a)2.

2. Additional requirements become applicable to an affected source under the acid rain program.

3. The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.

(d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in condition **A13**, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:



1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.
2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.
3. If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under condition **A13(b)** and condition **A13(c)**.
4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to condition **A13(d)**, he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

Tenn. Comp. R. & Regs. parts 1200-03-09-.02(11)(f)6 and 7.

- A14. Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:
- (a) Transfer of ownership permit application is filed consistent with the provisions of Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.03(6), and
  - (b) written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(f)4(i)(IV) and Paragraph 1200-03-09-.03(6)

- A15. Air pollution alert.** When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.03(1) and Rule 1200-03-15-.03.

- A16. Construction permit required.** Except as exempted in Tenn. Comp. R. & Regs. Rule 1200-03-09-.04, or excluded in Tenn. Comp. R. & Regs. subparagraph 1200-03-02-.01(1)(aa) or subparagraph 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

Tenn. Comp. R. & Regs. subparagraph 1200-03-09-.01(1)(a)

- A17. Notification of changes.** The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.
- (a) change in air pollution control equipment
  - (b) change in stack height or diameter
  - (c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.02(7)

- A18. Schedule of compliance.** The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(d)3 and 40 CFR Part 70.5(c)



**A19. Title VI.**

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

(b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

(c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program(SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.

Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.03(8)

**A20. 112 (r).** The permittee shall comply with the requirement to submit to the Administrator or designated State Agency a risk management plan, including a registration that reflects all covered processes, by June 21, 1999, if the permittee's facility is required pursuant to 40 CFR, 68, to submit such a plan.

Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.03(8)

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## SECTION B

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### GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

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- B1. Recordkeeping.** Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.
- (a) Where applicable, records of required monitoring information include the following:
1. The date, place as defined in the permit, and time of sampling or measurements;
  2. The date(s) analyses were performed;
  3. The company or entity that performed the analysis;
  4. The analytical techniques or methods used;
  5. The results of such analyses; and
  6. The operating conditions as existing at the time of sampling or measurement.
- (b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.
- Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(e)1(iii)
- B2. Retention of monitoring data.** The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- Tenn. Comp. R. & Regs. subitem 1200-03-09-.02(11)(e)1(iii)(II)II
- B3. Reporting.** Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.
- Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(e)1(iii)
- B4. Certification.** Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(d)4
- B5. Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):
- (a) The identification of each term or condition of the permit that is the basis of the certification;
  - (b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
  - (c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in **B5(b)** above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion\* or exceedance\*\* as defined below occurred; and
  - (d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
- \* "Excursion" shall mean a departure from an indicator range established for monitoring under Tenn. Comp. R. & Regs. Paragraph 1200-03-09-.02(11), consistent with any averaging period specified for averaging the results of the monitoring.

\*\* "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

**B6. Submission of compliance certification.** The compliance certification shall be submitted to:

The Tennessee Department of Environment and Conservation Environmental Field Office specified in Section E of this permit	and	Air Enforcement and Toxics Branch US EPA Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303
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Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(e)3(v)(IV)

**B7. Emergency provisions.** An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.

2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.

3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

4. The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in Tenn. Comp. R. & Regs. Rule 1200-03-20-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in Tenn. Comp. R. & Regs. Rule 1200-03-20-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Tenn. Comp. R. & Regs. Division 1200-03 or other applicable requirement.

Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)7

**B8. Excess emissions reporting.**

(a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Tenn. Comp. R. & Regs. Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.

(b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Tenn. Comp. R. & Regs. Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than

twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

1. Stack or emission point involved
2. Time malfunction, startup, or shutdown began and/or when first noticed
3. Type of malfunction and/or reason for shutdown
4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

Tenn. Comp. R. & Regs. Rules 1200-03-20-.03 and .04

**B9. Malfunctions, startups and shutdowns - reasonable measures required.** The permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60(Standards of performance for new stationary sources), 61(National emission standards for hazardous air pollutants) and 63(National emission standards for hazardous air pollutants for source categories).

Tenn. Comp. R. & Regs. Rule 1200-03-20-.02

**B10.** Reserved.

**B11. Report required upon the issuance of a notice of violation for excess emissions.** The permittee must submit within twenty (20) days after receipt of the notice of violation, the data required below. If this data has previously been available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same twenty (20) day time period. The minimum data requirements are:

- (a) The identity of the stack and/or other emission point where the excess emission(s) occurred;
- (b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
- (c) The time and duration of the emissions;
- (d) The nature and cause of such emissions;
- (e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;
- (f) The steps taken to limit the excess emissions during the occurrence reported, and
- (g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the twenty (20) day period specified shall preclude the admissibility of the data for determination of potential enforcement action.

Tenn. Comp. R. & Regs. Paragraphs 1200-03-20-.06(2), (3) and (4)

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## SECTION C

### PERMIT CHANGES

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- C1. Operational flexibility changes.** The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:
- (a) The change cannot be subject to a requirement of Title IV of the Federal Act or Tenn. Comp. R. & Regs. Chapter 1200-03-30.
  - (b) The change cannot be a modification under any provision of Title I of the federal Act or Tenn. Comp. R. & Regs. Division 1200-03.
  - (c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
  - (d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Tenn. Comp. R. & Regs. Rule 1200-03-09-.04.
  - (e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.
  - (f) The change shall not qualify for a permit shield under the provisions of Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)6.
  - (g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(a)4(ii)

- C2. Section 502(b)(10) changes.**
- (a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Tenn. Comp. R. & Regs. Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.
  - (b) The written notification must be signed by a facility Title V responsible official and include the following:
    - 1. a brief description of the change within the permitted facility;
    - 2. the date on which the change will occur;
    - 3. a declaration and quantification of any change in emissions;
    - 4. a declaration of any permit term or condition that is no longer applicable as a result of the change; and
    - 5. a declaration that the requested change is not a Title I modification and will not exceed allowable emissions under the permit.
  - (c) The permit shield provisions of Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(a)4(i)

- C3. Administrative amendment.**
- (a) Administrative permit amendments to this permit shall be in accordance with Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.
  - (b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of Tenn. Comp. R. & Regs. subparagraph 1200-03-09-.02(11)(e), subparagraph 1200-03-09-.02(11)(f), and subparagraph 1200-03-09-.02(11)(g) for significant permit modifications.
  - (c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(f)4

**C4. Minor permit modifications.**

- (a) The permittee may submit an application for a minor permit modification in accordance with Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(ii).
- (b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.
- (c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.
- (d) Minor permit modifications do not qualify for a permit shield.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(ii)

**C5. Significant permit modifications.**

- (a) The permittee may submit an application for a significant modification in accordance with Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(iv).
- (b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(iv)

**C6. New construction or modifications.**

Future construction at this facility that is subject to the provisions of Tenn. Comp. R. & Regs. Rule 1200-03-09-.01 shall be governed by the following:

- (a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.
- (b) Sources desiring the permit shield shall choose the administrative amendment route of Tenn. Comp. R. & Regs. part 1200-03-09-.02(11)(f)4 or the significant modification route of Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(iv).
- (c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of Tenn. Comp. R. & Regs. subpart 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

Tenn. Comp. R. & Regs. item 1200-03-09-.02(11)(d) 1(i)(V)



## SECTION D

### GENERAL APPLICABLE REQUIREMENTS

- D1. Visible emissions.** With the exception of air emission sources exempt from the requirements of Tenn. Comp. R. & Regs. Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million BTU per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-minute averaging.
- Consistent with the requirements of Tenn. Comp. R. & Regs. Chapter 1200-03-20, due allowance may be made for visible emissions in excess of that permitted under Tenn. Comp. R. & Regs. Chapter 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or an authorized representative upon request.
- Tenn. Comp. R. & Regs. Paragraphs 1200-03-05-.01(1), 1200-03-05-.03(6) and 1200-03-05-.02(1)
- D2. General provisions and applicability for non-process gaseous emissions.** Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.
- Tenn. Comp. R. & Regs. Paragraph 1200-03-06-.03(2)
- D3. Non-process emission standards.** The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in Tenn. Comp. R. & Regs. Chapter 1200-03-06.
- D4. General provisions and applicability for process gaseous emissions.** Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.
- Tenn. Comp. R. & Regs. Paragraph 1200-03-07-.07(2)
- D5. Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in Tenn. Comp. R. & Regs. Chapter 1200-03-07.
- D6. Sulfur dioxide emission standards.** The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in Tenn. Comp. R. & Regs. Chapter 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.
- D7. Fugitive Dust.**
- (a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
  2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Tenn. Comp. R. & Regs. Chapter 1200-03-20.

Tenn. Comp. R. & Regs. Chapter 1200-03-08

**D8. Open burning.** The permittee shall comply with the Tenn. Comp. R. & Regs. 1200-03-04 for all open burning activities at the facility.

Tenn. Comp. R. & Regs. Chapter 1200-03-04

**D9. Asbestos.** Where applicable, the permittee shall comply with the requirements of Tenn. Comp. R. and Regs. 1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

Tenn. Comp. R. & Regs. subparagraph 1200-03-11-.02(2)(d) and 40 CFR, Part 61

**D10. Annual certification of compliance.** The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of Tenn. Comp. R. & Regs. 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of Tenn. Comp. R. & Regs. 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

**D11. Emission Standards for Hazardous Air Pollutants.** Where applicable, the permittee shall comply with the Tenn. Comp. R. & Regs. 0400-30-38 for all emission sources subject to a requirement contained therein.

Tenn. Comp. R. & Regs. Chapter 0400-30-38

**D12. Standards of Performance for New Stationary Sources.** Where applicable, the permittee shall comply with the Tenn. Comp. R. & Regs. 0400-30-39 for all emission sources subject to a requirement contained therein.

Tenn. Comp. R. & Regs. Chapter 0400-30-39

**D13. Gasoline Dispensing Facilities.** Where applicable, the permittee shall comply with the Tenn. Comp. R. & Regs. Rule 1200-03-18-.24 for all emission sources subject to a requirement contained therein.

**D14. Internal Combustion Engines.**

(a) All stationary reciprocating internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of Tenn. Comp. R. & Regs. 0400-30-38-.01.

(b) All stationary compression ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of Tenn. Comp. R. & Regs. 0400-30-39-.01.

(c) All stationary spark ignition internal combustion engines, including engines deemed insignificant activities and insignificant emission units, shall comply with the applicable provisions of Tenn. Comp. R. & Regs. 0400-30-39-.02.

Tenn. Comp. R. & Regs. 0400-30-38 and 39



## SECTION E

### SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, AND MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

#### E1. Fee payment

**FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 53-0090**

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
<b>PARTICULATE MATTER (PM)</b>	47.90	<b>AEAR</b>	Includes <b>or</b> does not include all fee emissions.
<b>PM<sub>10</sub></b>	N/A	<b>AEAR</b>	Includes <b>or</b> does not include all fee emissions.
<b>SO<sub>2</sub></b>	N/A	<b>AEAR</b>	Includes <b>or</b> does not include all fee emissions.
<b>VOC</b>	184.92	<b>AEAR</b>	Includes <b>or</b> does not include all fee emissions.
<b>NO<sub>x</sub></b>	N/A	<b>AEAR</b>	Includes <b>or</b> does not include all fee emissions.
<b>CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAPs WITHOUT A STANDARD)*</b>			
<b>VOC FAMILY GROUP</b>	118.22	<b>AEAR</b>	Fee emissions are included in VOC above.
<b>NON-VOC GASEOUS GROUP</b>	N/A	<b>N/A</b>	N/A
<b>PM FAMILY GROUP</b>	N/A	<b>N/A</b>	N/A
<b>CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAPs WITH A STANDARD)**</b>			
<b>VOC FAMILY GROUP</b>	4.92	<b>AEAR</b>	NESHAP (40 CFR Part 63 Subpart WWW). Fee emissions are included in VOC above.
<b>NON-VOC GASEOUS GROUP</b>	N/A	<b>N/A</b>	N/A
<b>PM FAMILY GROUP</b>	N/A	<b>N/A</b>	N/A
<b>CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***</b>			
<b>EACH NSPS POLLUTANT NOT LISTED ABOVE</b>	N/A	<b>AEAR</b>	N/A

#### NOTES

**AAP** The Annual Accounting Period (AAP) is a twelve (12) consecutive month period that either (a) begins each July 1<sup>st</sup> and ends June 30<sup>th</sup> of the following year when fees are paid on a fiscal year basis, or (b) begins January 1<sup>st</sup> and ends December 31<sup>st</sup> of the same year when fees are paid on a calendar year basis. The Annual Accounting Period at the time of permit renewal issuance began **July 1, 2018**, and ends **June 30, 2019**. The next Annual Accounting Period begins **July 1, 2019**, and ends **June 30, 2020** unless a request to change the annual accounting period is submitted by the responsible official as required by subparagraph 1200-03-26-.02(9)(b) and approved by the Technical Secretary. If the permittee wishes to revise their annual accounting period or their annual emission fee basis as allowed by subparagraph 1200-03-26-.02(9)(b), the responsible official must submit the request to the Division in writing on or before December 31 of the annual accounting period for which the fee is due. If a change in fee basis from allowable emissions to actual emissions for any pollutant is requested, the request from the responsible official must include the methods that will be used to determine actual emissions.

**N/A** N/A indicates that no emissions are specified for fee computation.

**AEAR** If the permittee is paying annual emission fees on an actual emissions basis, **AEAR** indicates that an Actual Emissions Analysis is Required to determine the actual emissions of:

- (1) **each regulated pollutant** (Particulate matter, SO<sub>2</sub>, VOC, NO<sub>x</sub> and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
- (2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family),
- (3) **the Miscellaneous HAP Category,**
- (4) **the Specific HAP Category, and**
- (5) **the NSPS Category**

under consideration during the **Annual Accounting Period**.

- \* **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
- \*\* **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).
- \*\*\* **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each New Source Performance Standard (NSPS) pollutant whose emissions are not included in the **PM, SO<sub>2</sub>, VOC or NO<sub>x</sub>** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

#### END NOTES

- The permittee shall:**
- (1) Pay Title V **annual emission fees**, on the emissions and year bases requested by the responsible official and approved by the Technical Secretary, for each annual accounting period (AAP) by the payment deadline(s) established in TAPCR 1200-03-26-.02(9)(g). Fees may be paid on an **actual, allowable, or mixed** emissions basis; and on either a **state fiscal year** or a **calendar year**, provided the requirements of 1200-03-26-.02(9)(b) are met. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8).
  - (2) Sources paying annual emissions fees on an allowable emissions basis: pay annual allowable based emission fees for each annual accounting period pursuant to TAPCR 1200-03-26-.02(9)(d).
  - (3) Sources paying annual emissions fees on an actual emissions basis: prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
    - (a) the completed **Fee Emissions Summary Table**,
    - (b) each **actual emissions analysis** required, and
    - (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's representative. These calculations must be based on the annual fee basis approved by the Technical Secretary (a state fiscal year [July 1 through June 30] or a calendar year [January 1 through December 31]). These records shall be used to complete the **actual emissions analyses** required by the above **Fee Emissions Summary Table**.
  - (4) Sources paying annual emissions fees on a mixed emissions basis: for all pollutants and all sources for which the permittee has chosen an actual emissions basis, prepare an **actual emissions analysis** for each AAP and pay **actual based emission fees** pursuant to TAPCR 1200-03-26-.02(9)(d). The **actual emissions analysis** shall include:
    - (a) the completed **Fee Emissions Summary Table**,
    - (b) each **actual emissions analysis** required, and
    - (c) the actual emission records for each pollutant and each source as required for actual emission fee determination, or a summary of the actual emission records required for fee determination, as specified by the Technical Secretary or the Technical Secretary's representative. These calculations must be based on the fee

bases approved by the Technical Secretary (payment on an actual or mixed emissions basis) and payment on a state fiscal year (July 1 through June 30) or a calendar year (January 1 through December 31). These records shall be used to complete the **actual emissions analysis**.

For all pollutants and all sources for which the permittee has chosen an allowable emissions basis, pay allowable based emission fees pursuant to TAPCR 1200-03-26-.02(9)(d).

- (5) When paying on an actual or mixed emissions basis, submit the **actual emissions analyses** at the time the fees are paid in full.

The annual emission fee due dates are specified in TAPCR 1200-03-26-.02(g) and are dependent on the Responsible Official's choice of fee bases as described above. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

**Payment of the fee due and the actual emissions analysis (if required) shall be submitted to The Technical Secretary at the following address:**

Payment of Fee to:

The Tennessee Department of Environment and Conservation  
Division of Fiscal Services  
Consolidated Fee Section – APC  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 10th Floor  
Nashville, Tennessee 37243

Actual Emissions Analyses to:

The Tennessee Department of Environment and Conservation  
Division of Air Pollution Control  
East Tennessee Permit Program  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 15th Floor  
Nashville, Tennessee 37243

or

An electronic copy (PDF) of actual emissions analysis can also be submitted to: [apc.inventory@tn.gov](mailto:apc.inventory@tn.gov)

TAPCR 1200-03-26-.02 (3) and (9), and 1200-03-09-.02(11)(e)1 (iii) and (vii)

## **E2. Reporting requirements.**

- (a) **Semiannual reports.** These reports shall cover the following 6-month periods; October 1 through March 31 and April 1 through September 30, and these reports shall be submitted within 60 days after the end of each 6-month period.

These semiannual reports shall include:

1. Reports of any monitoring and recordkeeping required by **Conditions E3-11, E3-12, E5-1, E5-2, E6-1, E6-2, E6-3, E6-5, E6-6, E7-1, E7-3, E7-4, E8-1, E8-3, and E8-4** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
2. The visible emission evaluation readings from **Conditions E3-8 and E7-5** of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
3. Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

**These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.**

TAPCR 1200-03-09-.02(11)(e)1.(iii)

- (b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with each term or condition contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work

practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
3. The status of compliance with each term or condition of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in **E2(b)2** above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion\* or exceedance\*\* as defined below occurred; and
4. Such other facts as the Technical Secretary may require to determine the compliance status of the source.

\* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

\*\* "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The annual compliance certification shall continue to cover the following 12-month period from April 1 through March 31 and shall be submitted within 60 days (due date May 30) after the 12-month period ending March 31.

These certifications shall be submitted to **TN APCD and EPA at the following addresses:**

The Technical Secretary  
Division of Air Pollution Control  
Knoxville Environmental Field Office  
3711 Middlebrook Pike  
Knoxville, Tennessee 37921

Air and EPCRA Enforcement Branch  
US EPA Region IV  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

(or electronic pdf copy to: [APC.KnoxEFO@TN.gov](mailto:APC.KnoxEFO@TN.gov))

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

- (c) **NESHAP Reporting Requirements.** The permittee must submit 40 CFR Part 63, Subpart WWWW (MACT WWWW) reports as follows:

1. The permittee must submit each report in Table 14 in Attachment 4 to this permit that applies to the permittee.
2. [Reserved – does not apply]
  - (i) [Reserved – does not apply]
  - (ii) [Reserved – does not apply]
  - (iii) [Reserved – does not apply]

- (iv) [Reserved – does not apply]
  - (v) The permittee shall submit semiannual MACT compliance reports for the same 6-month periods as the semiannual reports described in **E2(a)** above, and these reports shall be submitted within 60 days after the end of each 6-month period.
3. The semiannual MACT compliance report must contain the information in paragraphs (i) through (vii) below:
- (i) Company name and address.
  - (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - (iii) Date of the report and beginning and ending dates of the reporting period.
  - (iv) If the permittee had a startup, shutdown, or malfunction during the reporting period and the permittee took actions consistent with the permittee's startup, shutdown, and malfunction plan, the compliance report must include the information in 40 CFR §63.10(d)(5)(i).
  - (v) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to the permittee, and there are no deviations from the requirements for work practice standards in Table 4 to 40 CFR Part 63, Subpart WWWW, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.
  - (vi) [Reserved – does not apply]
  - (vii) Reports of any monitoring and recordkeeping required by **Conditions E4-1, E4-2, E4-5, and E4-8** of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
4. For each deviation from an organic HAP emissions limitation (i.e., emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where the permittee is not using a CMS to comply with the organic HAP emissions limitations or work practice standards in 40 CFR Part 63, Subpart WWWW, the compliance report must contain the information in paragraphs E2(c)3(i) through (iv) above and in paragraphs E2(c)4(i) and (ii) below. This includes periods of startup, shutdown, and malfunction.
- (i) The total operating time of each affected source during the reporting period.
  - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
5. [Reserved – does not apply]
- (i) [Reserved – does not apply]
  - (ii) [Reserved – does not apply]
  - (iii) [Reserved – does not apply]
  - (iv) [Reserved – does not apply]
  - (v) [Reserved – does not apply]
  - (vi) [Reserved – does not apply]
  - (vii) [Reserved – does not apply]

- (viii) [Reserved – does not apply]
  - (ix) [Reserved – does not apply]
  - (x) [Reserved – does not apply]
  - (xi) [Reserved – does not apply]
  - (xii) [Reserved – does not apply]
6. The permittee must report if the permittee has exceeded the 100 tpy organic HAP emissions threshold if that exceedance would make the permittee's facility subject to 40 CFR §63.5805(a)(1) or (d). Include with this report any request for an exemption under 40 CFR §63.5805(e). If the permittee receives an exemption under 40 CFR §63.5805(e) and subsequently exceeds the 100 tpy organic HAP emissions threshold, the permittee must report this exceedance as required in 40 CFR §63.5805(f).
7. [Reserved – does not apply]
8. Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in table 14 to 40 CFR Part 63, Subpart WWWW , and not based on the requirements in 40 CFR §63.999.

**These reports must be certified by a responsible official consistent with Condition B4 of this permit and shall be submitted to The Technical Secretary at the following address.**

The Technical Secretary  
Division of Air Pollution Control  
William R. Snodgrass Tennessee Tower, 15<sup>th</sup> Floor  
312 Rosa L. Parks Avenue  
Nashville, Tennessee 37243

**or**

An electronic copy (PDF) can be submitted to: [Air.Pollution.Control@tn.gov](mailto:Air.Pollution.Control@tn.gov)

9. Where multiple compliance options are available, the permittee must state in the permittee's next semiannual MACT compliance report if the permittee has changed compliance options since the permittee's last semiannual MACT compliance report.

40 CFR §63.10, 40 CFR §63.5910 and TAPCR 1200-03-09-.02(11)(e)1.(iii)

## GENERAL PERMIT CONDITIONS

### E3-1. Identification of Responsible Official, Technical Contact, and Billing Contact

- a) The applications that were utilized in the preparation of this permit are dated June 1, 2016 and April 10, 2017, and signed by the Responsible Official Scott D. Martz, Business Unit Director of the permitted facility). If this person terminates employment or is assigned different duties and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants.



b) The applications that were utilized in the preparation of this permit are dated June 1, 2016 and April 10, 2017, and identify Mark Youmans as the Principal Technical Contact for the permitted facility. If this person terminates his employment or is assigned different duties such that he is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.

c) The applications that were utilized in the preparation of this permit are dated June 1, 2016 and April 10, 2017, and identify Mark Youmans as the Billing Contact for the permitted facility. If this person terminates his employment or is assigned different duties such that he is no longer the Billing Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Billing Contact and certification of truth and accuracy.

TAPCR 1200-03-09-.03(8)

**E3-2. Accidental Release Plan:** The permittee is not required to file an accidental release plan pursuant to Section 112(r) of the Clean Air Act and Chapter 1200-03-32 of the TAPCR.

TAPCR 1200-03-32

**E3-3. Compliance Assurance Monitoring:** This facility is not subject to the requirements of 40 CFR Part 64 (Compliance Assurance Monitoring).

TAPCR 1200-03-09-.03(8) and 40 CFR Part 64

**E3-4.** Insignificant activities identified in the Title V application per Rules 1200-03-09-.04(5) and 1200-03-04-.04(1) of the Tennessee Air Pollution Control Regulations are listed below. Additional insignificant activities may be added and operated at any time with the provision that a written notification shall be submitted to the Technical Secretary including an updated APC V.2 application form with a Truth, Accuracy, and Completeness statement signed by a responsible official. The permit may be updated to include additional insignificant sources by means of an administrative amendment if necessary. The addition of insignificant activities which are identified as insignificant per rules 1200-03-09-.04(5)f or (g) of the TAPCR does not require notification to the Division of Air Pollution Control.

Activity or Emissions Unit	Rule (TAPCR) for Insignificant or Exempt Status
Tank 1: 10,000 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank 3: 10,000 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank 4: 10,000 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank 2: 8,000 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank A: 7,500 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank B: 7,500 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Tank C: 9,000 gallon polystyrene resin storage tank	1200-03-09-.04(5)(a)(4)(i)
Paved/ unpaved roads and parking areas	1200-03-09-.04(5)(f) 1 and 2

TAPCR 1200-03-09-.04(5) and TAPCR 1200-03-04-.04(1)

**E3-5.** The permittee shall comply with all applicable federal and state regulations concerning the operation of the sources in this permit. This includes but is not limited to federal regulations published under 40 CFR Part 63 for sources of hazardous air pollutants and 40 CFR Part 60, New Source Performance Standards.

TAPCR 1200-03-09-.03(8)

**E3-6.** The sources in this permit shall operate in accordance with the terms of this permit and the information submitted in the approved application.

TAPCR 1200-03-09-.02(6) and the applications dated June 1, 2016 and April 10, 2017

- E3-7. Recordkeeping:** If required by the conditions of this permit, recordkeeping requirements for this source, including all data and calculations, must be updated and maintained based on the following schedule:

<u>Record Keeping Type</u>	<u>Update Requirement</u>
Monthly Log	Recorded within 30 days after the end of the month
Weekly Log	Recorded within 7 days after the end of the week
Daily Log	Recorded within 7 days after the end of the day

All logs and records specified in this permit shall be made available upon request by the Technical Secretary or representative, recorded in a permanent suitable format, and retained at the source location for a period of not less than five (5) years unless otherwise noted. All logs and records specified in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same information that is required. Computer-generated logs are also acceptable. Logs and records are not required to be submitted semiannually unless specified in **Condition E2(a)1 or E2(c)3(vii).**

TAPCR 1200-03-10-.02(2)(a), 1200-03-10-.04(2)(b) and 1200-03-09-.02(11)(e)1.(iii)

- E3-8. Visible Emissions:** Unless otherwise indicated, visible emissions from the sources at this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

**Compliance Method:** The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended September 11, 2013, that is enclosed as Attachment 1.

**If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.**

TAPCR 1200-03-09-.02(11)(e)1(iii)

- E3-9.** All air pollution control devices shall be operating when the equipment served by the devices are in operation. Upon the malfunction/failure of any emission control device(s) serving a particular source, the operation of the process(es) served by the device(s) shall be regulated by Chapter 1200-03-20 of the Tennessee Air Pollution Control Regulations. This also applies to any excess emissions due to start-up and shutdowns.

TAPCR 1200-03-20

**Compliance Method:** Following the requirements as identified in TAPCR 1200-03-20. Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source

- E3-10.** Routine maintenance as required to comply with the specified emission limits shall be performed on the air pollution control devices. Monthly logs of maintenance and/or repairs for all control devices shall be kept. The logs shall denote what maintenance and what repair was done, when it was done, by whom, and when problems were rectified denoting time and date accomplished. Computer-generated logs are also acceptable. Each maintenance/repair log must be made available upon request by the Technical Secretary or representative. Such logs must be maintained for five (5) years. Records from these logs are not required to be submitted semiannually unless required in Condition E2(a)(1) or under MACT reporting.

TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.



- E3-11.** A daily log of operating hours and material usage shall be maintained in the format specified below in Table E3-11 or an alternative format which readily provides the same information. A separate log shall be kept for each source (53-0090-02, 53-0090-03, and 53-0090-04) to keep the logs specified in **Conditions E5-1, E6-1, E7-1, and E8-1**. These logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years. **All data, including all required calculations, must be entered in the log no later than seven (7) days from the end of the day for which the data is required.**

Table E311 DAILY MATERIAL THROUGHPUT LOG FOR:

SOURCES 53-0090-02,-03,-04

DATE (MM/DD/YYYY)	Throughput (lbs)	# of Hours Operated (hr)	Daily Average Throughput (lbs/hr)
TOTALS			

- E3-12.** VOC (non-styrene) and HAP emissions shall be calculated and recorded in the following logs to demonstrate compliance with the permit conditions. A monthly log of material usage, VOC content, Styrene content, HAP content, VOC (non-styrene) emissions, Styrene emissions, and HAP emissions shall be maintained in the format specified below in Table E3-12A or an alternative format which readily provides the same information. An annual VOC and HAP emissions log shall be maintained in the format specified below in Table E3-12B or an alternative format which readily provides the same information. Separate logs shall be kept for each source (53-0090-02, 53-0090-03, and 53-0090-04) to keep the logs specified in **Conditions E6-5, E6-6, E7-3, E7-4, E8-1 and E8-3**. These logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five (5) years. **All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required.**

Table E312A MONTHLY VOC AND HAP EMISSIONS LOG FOR:

SOURCES 53-0090-02,-03,-04

MONTH/YEAR: \_\_\_\_\_/\_\_\_\_

Material Name	Usage (gallons per month)	VOC Content (pounds VOC per gallon)	VOC (non-styrene) Emissions (tons VOC per month)	HAP <sub>1</sub> (Styrene) Content (pounds per gallon)	HAP <sub>1</sub> (Styrene) Emission Factor <sup>(*)</sup> (lb/lb)	HAP <sub>1</sub> (Styrene) Emissions (tons per month)	HAP <sub>p</sub> Content (pounds HAP <sub>p</sub> per gallon)	HAP <sub>p</sub> Emission Factor <sup>(*)</sup> (lb/lb)	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per month)	Total HAP Emissions (tons HAP <sub>1</sub> thru HAP <sub>n</sub> per month)
Material <sub>1</sub>										
Material <sub>i</sub>										
Material <sub>k</sub>										
Total										

- (\*) The HAP emission factor is:
- Styrene and other HAP from resin used in polymer casting: 0.015 lb Styrene emitted per pound of Styrene used; in the batch mixing and casting process, approved by the Division in a letter dated March 22, 2018.
  - Styrene and other HAP from gelcoat used to form molds in conjunction with polymer casting: the appropriate emission factor (1f, 1g, or 1h from Table 1 to Subpart WWWW of Part 63).
  - Styrene and other HAP from other operations using thermoset resins or gelcoats containing styrene: the appropriate emission factor from Table 1 to Subpart WWWW of Part 63.
  - Site specific emission factor: In lieu of an emission factor calculated using the equations in Table 1 to Subpart WWWW of Part 63, the permittee may elect to use a site-specific organic HAP emissions factor based on actual facility HAP emissions test data. The emissions test must be conducted and data reduced in accordance with the provisions of Subpart WWWW of Part 63. At least 30 days prior to conducting the emissions test, the Technical Secretary shall be given notice in order to afford him the opportunity to have an observer present. To use the site-specific organic HAP emissions factor, the permittee shall furnish the Technical Secretary a written report of the results of the emissions test for approval, and request an administrative amendment to this permit incorporating the site-specific organic HAP emissions factor after approval of the emissions test report. Upon approval of the emissions test report, the site-specific organic HAP emissions factor will be incorporated in this permit through an administrative permit amendment.

#### EQUATIONS FOR THE VOC/HAP EMISSIONS LOG CALCULATIONS:

- Material<sub>i</sub> VOC Emissions (tons VOC per month)  
= (Material<sub>i</sub> Usage (gpm)) (Material<sub>i</sub> VOC Content (lb VOC per gallon)) / (2000 lb/ton)
- Material<sub>i</sub> HAP<sub>1</sub> (Styrene) Emissions (tons styrene per month)  
=  $\frac{(\text{Material}_i \text{ Usage (gpm)}) (\text{Material}_i \text{ Styrene Contents (lb styrene per gallon)}) (\text{Material}_i \text{ Styrene Emission Factor (lb styrene emitted per lb styrene used)})}{(2000 \text{ lb/ton})}$
- Material<sub>i</sub> HAP<sub>p</sub> Emissions (tons HAP<sub>p</sub> per month)  
= (Material<sub>i</sub> Usage (gpm))(Material<sub>i</sub> HAP<sub>p</sub> Contents (lb HAP<sub>p</sub> per gallon))/(2000 lb/ton)

Where: i= 1,2,3,.....k = the number of different Materials;

p= 1,2,3,.....n = the number of different hazardous air pollutants

**Table E3-12B 12-CONSECUTIVE MONTHS VOC AND HAP EMISSIONS LOG FOR:  
SOURCES 53-0090-02, -03, -04**

Month and Year	VOC Emissions (tons per month)	VOC Emissions (tons per 12 months *)	HAP <sub>1</sub> (Styrene) Emissions (tons per month)	HAP <sub>1</sub> (Styrene) Emissions (tons per 12 month *)s	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per month)	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per 12 months*)	Total HAP Emissions (tons HAP <sub>1</sub> thru. HAP <sub>n</sub> per month)	Total HAP Emissions (tons HAP <sub>1</sub> thru. HAP <sub>n</sub> per 12 months*)

(\*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months]. This log is the total amount of VOCs and HAPs emitted to the air on a 12 month consecutive basis.

Tables E3-12A and E3-12B or alternative format(s) which readily provide(s) the same information shall be used to keep the logs specified in **Conditions E6-5, E6-6, E7-3, E7-4, E8-1 and E8-3.**

DRAFT

**NESHAP  
WWWW**

**National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production.**

**Conditions E4-1 through E4-9 shall apply to the affected source listed in Condition E4-2**

**E4-1. 40 CFR Part 63, Subpart WWWW requirements.** This facility shall be subject to all applicable requirements of 40 CFR Part 63, Subpart WWWW - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, furthermore referred to as Subpart WWWW. The final rule for Subpart WWWW was published in the Federal Register on April 21, 2003. This facility became subject to the rule on April 21, 2006 and must maintain continuous compliance with all the applicable requirements of 40 CFR Part 63, Subpart WWWW.

40 CFR §§63.5785, 63.5790, and 63.5795

**E4-2.** The approved permit application lists source 53-0090-04 (Gel Coat Booth (S-56)) as the only source subject to 40 CFR Part 63, Subpart WWWW requirements. As an existing facility that does not have any centrifugal casting or continuous lamination/casting operations, or does have centrifugal casting or continuous lamination/casting operations, but the combination of all centrifugal casting and continuous lamination/casting operations emit less than 100 tpy of HAP, the permittee must meet the annual average organic HAP emissions limits in Table 3 in Attachment 4 to this permit (Organic HAP Emissions Limits for Existing Open Molding Sources, New Open Molding Sources Emitting Less Than 100 TPY of HAP, and New and Existing Centrifugal Casting and Continuous Lamination/Casting Sources that Emit Less Than 100 TPY of HAP) and the work practice standards in Table 4 in Attachment 4 to this permit (Work Practice Standards) that apply to the permittee.

40 CFR §63.5805(a)(2) and (b)

This requirement is pursuant to the permittee's facility operation description in the permittee's Title V applications dated June 1, 2016 and April 10, 2017.

**E4-3.** The permittee must use one of the following methods in paragraphs (a) through (d) below to meet the standards for open molding or centrifugal casting operations in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW. The permittee may use any control method that reduces organic HAP emissions, including reducing resin and gel coat organic HAP content, changing to nonatomized mechanical application, using covered curing techniques, and routing part or all of the permittee's emissions to an add-on control. The permittee may use different compliance options for the different operations listed in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW. The necessary calculations must be completed within 30 days after the end of each month. The permittee may switch between the compliance options in paragraphs (a) through (d) of this section. When the permittee changes to an option based on a 12-month rolling average, the permittee must base the average on the previous 12 months of data calculated using the compliance option the permittee is changing to, unless the permittee was previously using an option that did not require the permittee to maintain records of resin and gel coat use. In this case, the permittee must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options.

**(a)** *Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW.*

- 1.** Calculate the permittee's actual organic HAP emissions factor for each different process stream within each operation type. A process stream is defined as each individual combination of resin or gel coat, application technique, and control technique. Process streams within operations types are considered different from each other if any of the following four characteristics vary: the neat resin plus or neat gel coat plus organic HAP content, the gel coat type, the application technique, or the control technique. The permittee must calculate organic HAP emissions factors for each different process stream by using the appropriate equations in Table 1 to 40 CFR Part 63, Subpart WWWW for open molding and for centrifugal casting, or site-specific organic HAP emissions factors discussed in 40 CFR §63.5796. The emission factor calculation

should include any and all emission reduction techniques used including any add-on controls. If the permittee is using vapor suppressants to reduce HAP emissions, the permittee must determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to subpart WWW of 40 CFR part 63. If the permittee is using an add-on control device to reduce HAP emissions, the permittee must determine the add-on control factor by conducting capture and control efficiency testing using the procedures specified in 40 CFR §63.5850. The organic HAP emissions factor calculated from the equations in Table 1 to this subpart, or a site-specific emissions factor, is multiplied by the add-on control factor to calculate the organic HAP emissions factor after control. Use Equation 1 of this section to calculate the add-on control factor used in the organic HAP emissions factor equations.

$$\text{Add-on Control Factor} = 1 - \frac{\% \text{ Control Efficiency}}{100} \quad (\text{Eq. 1})$$

Where: Percent Control Efficiency equals a value calculated from organic HAP emissions test measurements made according to the requirements of 40 CFR §63.5850.

2. If the calculated emission factor is less than or equal to the appropriate emission limit, the permittee has demonstrated that this process stream complies with the emission limit in Table 3 to 40 CFR Part 63, Subpart WWW. It is not necessary that all the permittee's process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin or gel coat the permittee uses, if any of the process streams that include that resin or gel coat are to be used in any averaging calculations described in paragraphs (b) through (d) of this section, then all process streams using that individual resin or gel coat must be included in the averaging calculations.
- (b) *Demonstrate that, on average, the permittee meets the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type.* Demonstrate that on average the permittee meets the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 to 40 CFR Part 63, Subpart WWW that applies to the permittee.

1. Demonstrate as follows:

- (i) Group the process streams described in paragraph (a) to this section by operation type and resin application method or gel coat type listed in Table 3 to 40 CFR Part 63, Subpart WWW and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. To do this, sum the product of each individual organic HAP emissions factor calculated in paragraph (a)(1) of this section and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type as shown in Equation 2 of this section.

$$\text{Average organic HAP Emission Factor} = \frac{\sum_i^n (\text{Actual Process Stream EF}_i \times \text{Material}_i)}{\sum_i^n \text{Material}_i} \quad (\text{Eq. 2})$$

Where: Actual Process Stream EF<sub>i</sub> = actual organic HAP emissions factor for process stream i, lbs/ton  
 Material<sub>i</sub> = neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i, tons  
 n = number of process streams where the permittee calculated an organic HAP emissions factor

- (ii) The permittee may, but is not required to, include process streams where the permittee has demonstrated compliance as described in paragraph (a) of this section, subject to the limitations described in paragraph (a)(2) of this section, and the permittee is not required to and should not

include process streams for which the permittee will demonstrate compliance using the procedures in paragraph (d) of this section.

2. Compare each organic HAP emissions factor calculated in paragraph (b)(1) of this section with its corresponding organic HAP emissions limit in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW. If all emissions factors are equal to or less than their corresponding emission limits, then the permittee is in compliance.
- (c) *Demonstrate compliance with a weighted average emission limit.* Demonstrate each month that the permittee meets each weighted average of the organic HAP emissions limits in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW that apply to the permittee. When using this option, the permittee must demonstrate compliance with the weighted average organic HAP emissions limit for all the permittee's open molding operations, and then separately demonstrate compliance with the weighted average organic HAP emissions limit for all of the permittee's centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.
1. Each month calculate the weighted average organic HAP emissions limit for all open molding operations and the weighted average organic HAP emissions limit for all centrifugal casting operations for the permittee's facility for the last 12-month period to determine the organic HAP emissions limit the permittee must meet. To do this, multiply the individual organic HAP emissions limits in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW for each open molding (centrifugal casting) operation type by the amount of neat resin plus or neat gel coat plus used in the last 12 months for each open molding (centrifugal casting) operation type, sum these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) over the last 12 months as shown in Equation 3 of this section..

$$\text{Weighted Average Emission Limit} = \frac{\sum_{i=1}^n (\text{EL}_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i} \quad (\text{Eq. 3})$$

Where:  $\text{EL}_i$  = organic HAP emissions limit for operation type  $i$ , lbs/ton from Tables 3, or 5 to Subpart WWWW of Part 63

$\text{Material}_i$  = neat resin plus or neat gel coat plus used during the last 12-month period for operation type  $i$ , tons

$n$  = number of operations

2. Each month calculate the permittee's weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, multiply the permittee's actual open molding (centrifugal casting) operation organic HAP emissions factors calculated in paragraph (b)(1) of this section and the amount of neat resin plus and neat gel coat plus used in each open molding (centrifugal casting) operation type, sum the results, and divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations as shown in Equation 4 of this section.

$$\text{Actual Weighted Average Organic HAP Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Operation EF}_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i} \quad (\text{Eq. 4})$$

Where: Actual Individual  $\text{EF}_i$  = Actual organic HAP emissions factor for operation type  $i$ , lbs/ton

$\text{Material}_i$  = neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type  $i$ , tons

$n$  = number of operations

3. Compare the values calculated in paragraphs (c)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then the permittee is in compliance.
- (d) *Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type.* This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.
1. For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, the permittee may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph (d)(1). Table 7 to 40 CFR Part 63, Subpart WWWW presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7 to 40 CFR Part 63, Subpart WWWW, the resin is in compliance.
  2. The permittee may also use a weighted average organic HAP content for each application method described in paragraph (d)(1) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in paragraph (b)(1) of this section except substitute organic HAP content for organic HAP emissions factor. The permittee is in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to this subpart.
  3. The permittee may simultaneously use the averaging provisions in paragraph (b) or (c) of this section to demonstrate compliance for any operations and/or resins the permittee does not include in the permittee's compliance demonstrations in paragraphs (d)(1) and (2) of this section. However, any resins for which the permittee claims compliance under the option in paragraphs (d)(1) and (2) of this section may not be included in any of the averaging calculations described in paragraph (b) or (c) of this section.
  4. The permittee does not have to keep records of resin use for any of the individual resins where the permittee demonstrates compliance under the option in paragraph (d)(1) of this section unless the permittee elects to include that resin in the averaging calculations described in paragraph (d)(2) of this section.

40 CFR §63.5810

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**E4-4.** The permittee must:

- (a) Be in compliance at all times with the work practice standards in Table 4 to 40 CFR Part 63, Subpart WWWW, as well as the organic HAP emissions limits in Tables 3, or 5, or the organic HAP content limits in Table 7 to 40 CFR Part 63, Subpart WWWW, as applicable, that the permittee is meeting without the use of add-on controls.
- (b) Be in compliance with all organic HAP emissions limits in this subpart that the permittee meets using add-on controls, except during periods of startup, shutdown, and malfunction.
- (c) Always operate and maintain the permittee's affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR §63.6(e)(1)(i).
- (d) Develop a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR §63.6(e)(3) for any organic HAP emissions limits the permittee meets using an add-on control.

40 CFR §63.5835



**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**E4-5.** The permittee must monitor and collect the following continuous compliance data:

- (a) [Reserved – does not apply]
- (b) [Reserved – does not apply]
- (c) The permittee must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if the permittee is meeting any organic HAP emissions limits based on an organic HAP emissions limit in Tables 3 or 5 to 40 CFR Part 63, Subpart WWWW. The permittee must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if the permittee is meeting any organic HAP content limits in Table 7 to 40 CFR Part 63, Subpart WWWW if the permittee is averaging organic HAP contents. Resin use records may be based on purchase records if the permittee can reasonably estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier.
- (d) Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission as defined in 40 CFR §63.5810(a). However, the permittee must retain the records of resin and gel coat organic HAP content, and the permittee must include the list of these resins and gel coats and identify their application methods in the permittee's semiannual compliance reports. If after the permittee has initially demonstrated that a specific combination of an individual resin or gel coat, application method, and controls meets its applicable emission limit, and the resin or gel coat changes or the organic HAP content increases, or the permittee changes the application method or controls, then the permittee again must demonstrate that the individual resin or gel coat meets its emission limit as specified in paragraph (a) of 40 CFR §63.5810. If any of the previously mentioned changes results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW, the permittee must begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average.
- (e) [Reserved – does not apply]

40 CFR §63.5895

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**E4-6.** The permittee must demonstrate continuous compliance with the standards as follows:

- (a) The permittee must demonstrate continuous compliance with each standard in 40 CFR §63.5805 that applies to the permittee according to the methods specified in paragraphs (a)(1) through (4) of this section.
  - 1. [Reserved – does not apply]
  - 2. Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 or 5 to 40 CFR Part 63, Subpart WWWW, on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in 40 CFR §63.5895(d).
  - 3. Compliance with organic HAP content limits in Table 7 to 40 CFR Part 63, Subpart WWWW is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7 to 40 CFR Part 63, Subpart WWWW, on a 12-month rolling average, and/or by including in each compliance report a statement that resins and gel coats individually



meet the appropriate organic HAP content limits in Table 7 to 40 CFR Part 63, Subpart WWWW, as discussed in 40 CFR §63.5895(d).

4. Compliance with the work practice standards in Table 4 to 40 CFR Part 63, Subpart WWWW is demonstrated by performing the work practice required for the permittee's operation.

40 CFR §63.5900(a)

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- E4-7.** The permittee must report each deviation from each standard in 40 CFR §63.5805 that applies to the permittee. The deviations must be reported according to the requirements in 40 CFR §63.5910 and **Condition E2(c)** of this permit.

40 CFR §63.5900(b)

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- E4-8.** The permittee must keep the following records:

- (a) The permittee must keep the records listed in paragraphs (1) through (3) below.
  1. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR §63.10(b)(2)(xiv).
  2. The records in 40 CFR §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
  3. Records of performance tests, design, and performance evaluations as required in 40 CFR §63.10(b)(2).
- (b) [Reserved – does not apply]
- (c) The permittee must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3 and 7 in Attachment 4 to this permit.
- (d) The permittee must keep a certified statement that the permittee is in compliance with the work practice requirements in Table 4 in Attachment 4 to this permit (Work Practice Standards), as applicable.
- (e) [Reserved – does not apply]

40 CFR §63.5915

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- E4-9.** The permittee must comply with the applicable parts of the General Provisions in 40 CFR §§63.1 through 63.15, as shown in Table 15 in Attachment 4 to this permit.

**Compliance Method:** Compliance with this condition shall be assured based on information available to the Technical Secretary which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

<b>53-0090-01</b>	<b>Aggregate Truck Unloading (S-78)</b> Truck unloading of aggregate to silos. Emissions are controlled by eight (8) baghouses 1,100 dscfm each.
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Conditions E5-1 and E5-2 shall apply to source 53-0090-01.

**E5-1.** Material throughput for this source shall not exceed 31,000 pounds per hour (lb/hr) on a daily average basis.

Agreement letter dated March 8, 2001

**Compliance Method:** A daily log containing the operating hours and material throughput shall be maintained in the format specified in Table E3-11, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

**E5-2.** Particulate matter emitted from this source shall not exceed 0.02 grain per dry standard cubic foot (1.5 lb/hr or 6.6 tons/yr).

TAPCR 1200-03-07-.04(1)

**Compliance Method:** Baghouses A13 through A20 shall be operated continuously during operation of this source. Routine maintenance activities shall be performed on Baghouses A13 through A20. Appropriate maintenance logs including inspections, criteria for changing filters, and dates on which the filters are replaced shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

<b>53-0090-02</b>	<b>Continuous Mixers and Aggregate Transfer (S-53, S-62, S-63, and S-64)</b>
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Conditions E6-1 through E6-6 apply to source 53-0090-02

**E6-1.** The total stated design input capacity for this source is 58,450 pounds per hour (lb/hr) on a daily average basis.

**Compliance Method:** A daily log containing the operating hours and material throughput shall be maintained in the format specified in Table E3-11, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

**E6-2.** The maximum production for S-53 mixing process shall not exceed 1,500,000 pounds Maximum Annual Resin Usage and 10,000,000 pounds Maximum Production during any period of 12 consecutive months.

Agreement letter dated March 8, 2001

**Compliance Method:** A log of resin usage and production for S-53 shall be maintained in the format specified in Table E6-2 below, or an alternative format that readily shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

Table E6-2 Monthly and 12-Months Resin Usage and Production for S-53

Month and year	Resin Usage (lbs)	Resin Usage (lbs per 12 months)	Production (lbs)	Production (lbs per 12 months)

(\*) The Pounds per 12 Month value is the sum of the Resin Usage (or Production) in the 11 months preceding the month just completed + the Resin Usage (or Production) in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for pounds per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 pounds in 2 months]. This log is the total amount of Resin Usage (or Production) on a 12 month consecutive basis.

- E6-3.** The maximum production for S-53 shall not exceed 1,500,000 pounds Maximum Annual Resin Usage and 10,000,000 pounds Maximum Production during any period of 12 consecutive months.

Agreement letter dated March 8, 2001

**Compliance Method:** A log of resin usage and production for S-53 shall be maintained in the format specified in Table E6-2 below, or an alternative format that readily shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

Table E6-2 Monthly and 12-Months Resin Usage and Production for S-53

Month and year	Resin Usage (lbs)	Resin Usage (lbs per 12 months)	Production (lbs)	Production (lbs per 12 months)

(\*) The Pounds per 12 Month value is the sum of the Resin Usage (or Production) in the 11 months preceding the month just completed + the Resin Usage (or Production) in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for pounds per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 pounds in 2 months]. This log is the total amount of Resin Usage (or Production) on a 12 month consecutive basis.

- E6-4.** Particulate Matter emissions from this source shall not exceed 0.02 grain per dry standard cubic foot (1.7 lb/hr) of exhaust gases.

TAPCR 1200-03-07-.04(1)

**Compliance Method:** Compliance with this requirement shall be assured by maintaining a minimum pressure drop of 0.2 inches of water across the baghouse. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted.

For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and made readily available for inspection by the Technical Secretary or representative. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required. These records must be retained for a period of not less than five (5) years.

All data, including all required calculations, must be entered into the log below, or an alternative format that shows the information required to determine compliance, no later than seven (7) days from the end of the day for which the data is required.

**Daily Log of Pressure Drop for Baghouse A7      Month/Year: \_\_\_\_\_**

Day	Pressure Drop (in. H <sub>2</sub> O)
1	
2	
...	
31	

- E6-5.** Styrene emissions from the Continuous Mixers shall not exceed 10.3 tons during all intervals of any 12 consecutive months.

TAPCR 1200-03-.07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- E6-6.** Volatile Organic Compound emissions from this source shall not exceed 14.1 tons during all intervals of any 12 consecutive months (This includes the styrene emissions limited by **Condition E6-5**).

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

<b>53-0090-03</b>	<b>Batch Mixing and Casting (S-1 through S-51) with No Emission Control</b>
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Conditions E7-1 through E7-5 apply to source 53-0090-03

- E7-1.** The total stated design input capacity for this source is 16,026 pounds per hour (lb/hr) on a daily average basis.

**Compliance Method:** A daily log containing the operating hours and material throughput shall be maintained in the format specified in Table E3-11, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

- E7-2.** Particulate matter emissions from the batch mixing and casting stations (S-1 thru S-51) shall not exceed 0.004 grains per dry standard cubic foot (5.14 lb/hr or 22.5 tons/yr).

TAPCR 1200-03-07-.04(1)

**Compliance Method:** This is a multi-stations manual mixing and casting process line inside the facility without exhaust control. The building acts as a settling chamber with the assumption of 50% of the particulate settled inside the facility building. Compliance with this condition can be assured by compliance with **Conditions E7-1 and E7-5**.

- E7-3.** Styrene emissions from this source shall not exceed 103 tons during all intervals of any 12 consecutive months.

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- E7-4.** VOC emissions from this source shall not exceed 157.3 tons during all intervals of any 12 consecutive months (This includes the styrene emissions limited by **Condition E7-3**).

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- E7-5.** Visible Emissions from this source shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(3)

**Compliance Method:** The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended September 11, 2013, that is enclosed as Attachment 1.

**If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.**

TAPCR 1200-03-09-.02(11)(e)1(iii)

53-0090-04	Gel Coat Booth (S-56) with exhaust filter control.
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Conditions E8-1 through E8-4 apply to source 53-0090-04

- E8-1.** The total stated design input capacity for this source is 37.0 pounds per hour (lb/hr) on a daily average basis.

**Compliance Method:** A daily log containing the operating hours and material throughput shall be maintained in the format specified in Table E3-11, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

- E8-2.** Styrene emissions from this source shall not exceed 4.92 tons during all intervals of any 12 consecutive months.

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- E8-3.** VOC emissions from this source shall not exceed 13.52 tons during all intervals of any 12 consecutive months (This includes the styrene emissions limited by **Condition E8-1**).

TAPCR 1200-03-07-.07(2)

**Compliance Method:** Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- E8-4.** Particulate matter emissions from this source shall not exceed 0.02 grain per dry standard cubic foot of exhaust gas (2.57 pounds per hour or 11.3 tons/yr).

TAPCR 1200-03-07-.04(1)

**Compliance Method:** Compliance with this requirement shall be assured through the use of exhaust filters (filter pads) to control particulate emissions. The process shall not operate without the use of said controls. A log shall be kept denoting the actual day(s) that filters were replaced. The Technical Secretary may require the permittee to prove compliance with this rate.

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**END OF PERMIT NUMBER: 571704**

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**ATTACHMENT 1**

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**OPACITY MATRIX DECISION TREE for  
VISIBLE EMISSION EVALUATION METHOD 9,  
dated JUNE 18, 1996, amended SEPTEMBER 11, 2013**

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### Decision Tree PM for Opacity for Sources Utilizing EPA Method 9\*

#### Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.\*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

#### Typical Pollutants

Particulates, VOC, CO, SO<sub>2</sub>, NO<sub>x</sub>, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

#### Reader Error

EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards:

The TAPCD guidance is to declare non-compliance when the highest six-minute average\*\* exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

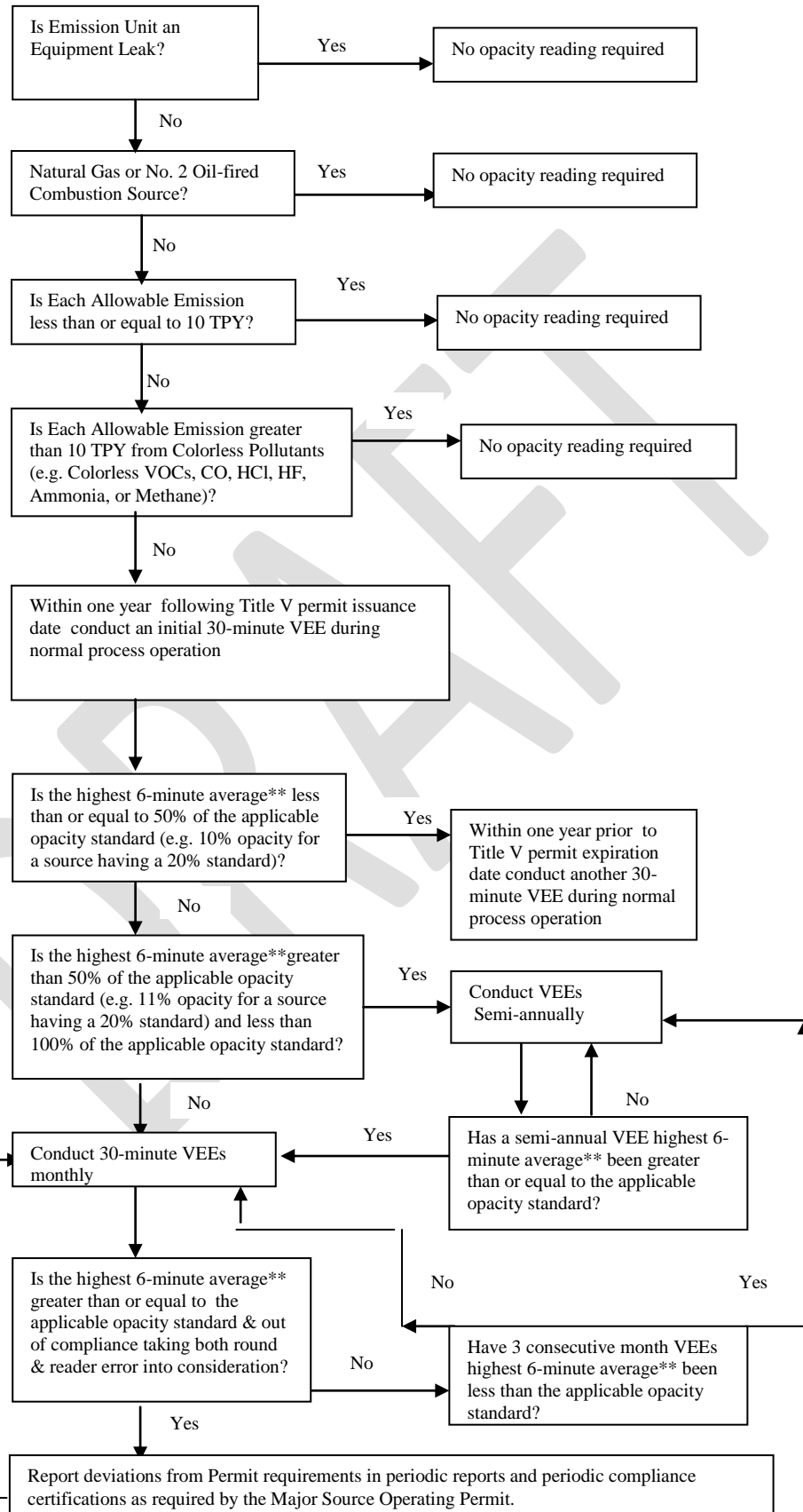
EPA Method 9, NSPS or NESHAPS stipulate opacity standards:

EPA guidance is to allow only engineering round. No allowance for reader error is given.

\*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

\*\*Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996  
Amended September 11, 2013



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## **ATTACHMENT 2**

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**AP-42 (dated 2/07), Section 4.4 – Polyester Resin Plastic Products Fabrication, Table 4.4-2**

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Table 4.4-2 EMISSIONS FACTORS FOR UNCONTROLLED POLYESTER RESIN  
PRODUCT FABRICATION PROCESSES <sup>a</sup>

(weight % of starting monomer emitted)

Process	EMISSION FACTOR	EMISSION FACTOR RATING
<b>Hand layup <sup>h</sup></b> <b>Resin</b> 30800726 - Manual Resin Application: Bucket and Brush  31401516 - Open Contact Molding: Resin/Laminate Application, Hand Layup, Brushing <b>Gel</b> 30800721 -Gel Coat: Manual Application  31401511 - Manual Gel Coat Application	See reference note "h"	See reference note "h"
<b>Spray Layup <sup>h</sup></b> <b>Resin</b> Non-vapor suppressed resin 30800723 - Mechanical Resin Application: nonatomized spray (includes pressure fed rollers)  30800730 - Mechanical Resin Application (non-vapor-suppressed)  30800732 - Mechanical Resin Application (vacuum bagging)  31401517 - Open Contact Molding: Resin Spray Layup  Vapor-suppressed resin 30800731 - Mechanical Resin Application (vapor-suppressed)  <b>Spray Layup</b> <b>Gel</b> 30800722 - Gel Coat: Atomized Spray 30800718 - Gel Coat: Nonatomized Spray 30800719 - Gel Coat: Robotic Spray 31401512 - Open Contact Molding: Spray Gel Coat Application	See reference note "h"	See reference note "h"
<b>Continuous Lamination <sup>c</sup></b> <b>Resin</b> 30800754 - Continuous Lamination	4 - 7	B
<b>Pultrusion <sup>c, d</sup></b> <b>Resin</b> 30800772 - Pultrusion	4 - 7	D
<b>Filament Winding <sup>c, e</sup></b> <b>Resin</b> 30800742 - Filament Application Non-vapor-suppressed resin Vapor-suppressed resin <sup>b</sup>	5 - 10 2 - 7	D

Process	EMISSION FACTOR	EMISSION FACTOR RATING
Marble Casting <sup>f</sup> Resin 30800766 - Polymer Casting (Cultured Marble or Marble Casting)	1- 3	B
Closed Molding <sup>c, g</sup> Resin 30800736 - Resin Closed Molding 31401525 - Closed Molding	1-3	D

<sup>a</sup> Reference 9. Ranges represent the variability of processes and sensitivity of emissions to process parameters. Single value factors should be selected with caution. More information on emissions from open molding and other processes are available from the American Composites Manufacturers Association website at <http://www.acmanet.org/>.

<sup>b</sup> Factors are 30 - 70% of those for nonvapor-suppressed resins.

<sup>c</sup> Gel coat is not normally used in this process.

<sup>d</sup> Resin factors for the continuous lamination process are assumed to apply.

<sup>e</sup> Resin factors for the hand layup process are assumed to apply.

<sup>f</sup> If molds or cast parts are gel coated, hand and spray layup gel coat factors are assumed to apply.

<sup>g</sup> Resin factors for marble casting, a semiclosed process, are assumed to apply.

<sup>h</sup> Users found that use of emissions factors for open molding processes from reference 9 generally underestimated emissions. As an alternative to estimating open molding emissions using reference 9, one may choose to use the emissions factors contained in the ANSI/ACMA/ICPA UEF-1-2004 Estimating Emission Factors from Open Molding Composite Processes ("UEF") document. Users who choose to use this document should employ the version that is current at the time of use. The UEF factor equations and all available supporting documentation regarding the development and validation of the UEF are available at <http://www.acmanet.org/ga/reg-emissions.cfm>. The official ANSI standard is also available at <http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI/ACMA/ICPA%20UEF-1-2004>.



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**ATTACHMENT 3**

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**Unified Emission Factors for Open Molding of Composites, October 13, 2009**

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**EF Table 1: Unified Emission Factors for Open Molding of Composites**

Revised and Approved: 10/13/2009

**Emission Rate in Pounds of Styrene Emitted per Ton of Resin or Gelcoat Processed**

Styrene content in resin/gelcoat, % <sup>(1)</sup>	<33 <sup>(2)</sup>	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	>50 <sup>(2)</sup>
Manual	0.126 x %styrene x 2000	83	89	94	100	106	112	117	123	129	134	140	146	152	157	163	169	174	180	(0.286 x %styrene) - 0.0529) x 2000
Manual w/ Vapor Suppressed Resin VSR <sup>(3)</sup>																				
Mechanical Atomized																				
Mechanical Atomized with VSR <sup>(3)</sup>																				
Mechanical Atomized Controlled Spray <sup>(4)</sup>																				
Mechanical Atomized Controlled Spray with VSR																				
Mechanical Non-Atomized																				
Mechanical Non-Atomized with VSR <sup>(3)</sup>																				
Mechanical Non-Atomized application of resins that contain Methyl Styrene monomer <sup>(10)</sup>																				
<b>Mechanical Non-Atomized Styrene monomer emission Factor (listed above) x .55</b>																				
Mechanical Non-Atomized Filled DCPD resins <sup>(11)</sup>																				
Filament application																				
Filament application with VSR <sup>(3)</sup>																				
Gelcoat Application																				
Gelcoat Controlled Spray Application <sup>(4)</sup>																				
Gelcoat Non-Atomized Application <sup>(8)</sup>																				
Lesser Atomized Gelcoat Application <sup>(12)</sup>																				
Covered-Cure after Roll-Out																				
Covered-Cure without Roll-Out																				
<b>Non-VSR process emission factor [listed above] x (0.80 for Manual &lt;or&gt; 0.65 for Mechanical)</b>																				
<b>Non-VSR process emission factor [listed above] x (0.50 for Manual &lt;or&gt; 0.55 for Mechanical)</b>																				
0.144 x % styrene x 2000		95	98	101	104	108	111	114	117	120	124	127	130	133	136	140	143	146	149	(0.1603 x % styrene)-0.0055) x 2000
0.184 x %styrene x 2000		122	127	133	138	144	149	155	160	166	171	177	182	188	193	199	204	210	215	(0.2746 x %styrene) - 0.0298) x 2000
0.120 x %styrene x 2000		79	83	86	90	93	97	100	104	108	111	115	118	122	125	129	133	136	140	0.65 x ((0.2746 x %styrene) - 0.0298) x 2000
0.445 x %styrene x 2000		294	315	336	356	377	398	418	439	460	481	501	522	543	564	584	605	626	646	(1.03646 x %styrene) - 0.195) x 2000
0.325 x %styrene x 2000		215	230	245	260	275	290	305	321	336	351	368	381	396	411	427	442	457	472	0.73 x ((1.03646 x %styrene) - 0.195) x 2000
SEE Note 9 below		198	205	214	223	232	241	250	259	268	278	287	296	305	314	323	332	341	350	(0.4506 x %styrene) - 0.0305) x 2000
for < 30 : 0.323 x % styrene x 2000		220	241	252	264	276	287	299	311	322	334	346	357	369	381	392	404	416	428	((0.5842 x % styrene)-0.07825) x 2000

**Emission Rate in Pounds of Methyl Methacrylate Emitted per Ton of Gelcoat Processed**

MMA content in gelcoat, % <sup>(6)</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	≥20
Gel coat application <sup>(7)</sup>	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	0.75 x %MMA x 2000

**Notes**

- 1 Including styrene monomer content as supplied, plus any extra styrene monomer added by the molders, but before addition of other additives such as powders, fillers, glass,....etc.
- 2 Formulas for materials with styrene content < 33%, are based on the emission rate at 33% (constant emission factor expressed as percent of available styrene), and for styrene content > 50% on the emission rate based on the extrapolated factor equations; these are not based on test data but are believed to be conservative estimates. The value for "% styrene" in the formulas should be input as a fraction. For example, use the input value 0.30 for a resin with 30% styrene content by wt.
- 3 The VSR reduction factor is determined by testing each resin/suppressant formulation according to the procedures detailed in the *CFA Vapor Suppressant Effectiveness Test*.
- 4 SEE the *CFA Controlled Spray Handbook* for a detailed description of the controlled spray procedures.
- 5 The effect of vapor suppressants on emissions from filament winding operations is based on the *Dow Filament Winding Emissions Study*.
- 6 Including MMA monomer content as supplied, plus any extra MMA monomer added by the molders, but before addition of other additives such as powders, fillers, glass,....etc.
- 7 Based on gelcoat data from *MMA Emission Study*.
- 8 SEE the July 17, 2001 EECOS report *Emission Factors for Non-Atomized Application of Gel Coats used in the Open Molding of Composites* for a detailed description of the non-atomized gelcoat testing.
- 9 Use the equation ((0.4506 x %styrene) - 0.0305) x 2000 for gelcoats with styrene contents between 19% and 32% by wt.; use the equation 0.185 x %styrene x 2000 for gelcoats with less than 19% styrene content by wt.
- 10 Refer to Section 3.0. Instructions and Examples for the Emission Factor table, 3.2 Calculation of the methyl styrene factor
- 11 Use this factor for the non-atomized application of DCPD or DCPD-blend resin, when filled to 30% or more by weight
- 12 Table from 30% TO 32% styrene content :
 

30	31	32
194	206	217

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**ATTACHMENT 4**

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**Relevant Tables from Subpart WWWW of Part 63**

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Table 1 to 40 CFR 63 Subpart WWWW .....	2 pages
Table 3 to 40 CFR 63 Subpart WWWW .....	2 pages
Table 4 to 40 CFR 63 Subpart WWWW .....	1 page
Table 5 to 40 CFR 63 Subpart WWWW .....	1 page
Table 7 to 40 CFR 63 Subpart WWWW .....	1 page
Table 14 to 40 CFR 63 Subpart WWWW .....	1 page
Table 15 to 40 CFR 63 Subpart WWWW .....	5 pages

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Table 1 to Subpart WWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams<sup>1</sup>

As specified in §63.5810, use the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	And you use...	With...	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) <sup>234</sup> ...	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) <sup>234</sup> ...
1. open molding operation	a. manual resin application	i. nonvapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll out	$EF = 0.126 \times \%HAP \times 2000 \times 0.8$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.8$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = (0.126 \times \%HAP \times 2000 \times 0.5$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.5$
	b. atomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.55$
	c. nonatomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. closed-mold curing with roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$
	d. atomized mechanical resin application with robotic or automated spray control <sup>5</sup>	nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times 0.77$	$EF = 0.77 \times ((0.714 \times \%HAP) - 0.18) \times 2000$
	e. filament application <sup>6</sup>	i. nonvapor-suppressed resin	$EF = 0.184 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.12 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000 \times 0.65$
	f. atomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000$



	g. nonatomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.185 \times \%HAP \times 2000$	$EF = ((0.4506 \times \%HAP) - 0.0505) \times 2000$
	h. atomized spray gel coat application using robotic or automated spray	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000 \times 0.73$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000 \times 0.73$
2. centrifugal casting operations <sup>78</sup>	a. heated air blown through molds	nonvapor-suppressed resin	$EF = 0.558 \times (\%HAP) \times 2000$	$EF = 0.558 \times (\%HAP) \times 2000$
	b. vented molds, but air vented through the molds is not heated	nonvapor-suppressed resin	$EF = 0.026 \times (\%HAP) \times 2000$	$EF = 0.026 \times (\%HAP) \times 2000$

## Footnotes to Table 1

<sup>1</sup> The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in subpart WWW. These equations may not be the most appropriate method to calculate emission estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other than rule compliance if these equations are the most accurate available.

<sup>2</sup> To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of §63.5810. The organic HAP emissions factors have units of lbs of organic HAP per ton of resin or gel coat applied.

<sup>3</sup> Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e., 33 percent HAP should be input as 0.33, not 33.

<sup>4</sup> The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.

<sup>5</sup> This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.

<sup>6</sup> Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.

<sup>7</sup> These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.

<sup>8</sup> If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

**Table 3 to Subpart WWW of Part 63 - Organic HAP Emissions Limits for Existing Open Molding Sources, New Open Molding Sources Emitting Less Than 100 TPY of HAP, and New and Existing Centrifugal Casting and Continuous Lamination/Casting Sources that Emit Less Than 100 TPY of HAP**

As specified in 40 CFR §63.5805, the permittee must meet the following organic HAP emissions limits that apply to the permittee:

If the permittee's operation type is . . .	And the permittee uses . . .	<sup>1</sup> The permittee's organic HAP emissions limit is . . .
1. open molding—corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton. 171 lb/ton. 123 lb/ton.
2. open molding—non-CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton. 188 lb/ton. 87 lb/ton.
3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton. 270 lb/ton. 238 lb/ton.
5. open molding—shrinkage controlled resins <sup>2</sup>	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton. 215 lb/ton. 180 lb/ton.
6. open molding—gel coat <sup>3</sup>	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton. 267 lb/ton. 377 lb/ton. 605 lb/ton. 854 lb/ton. 522 lb/ton.
7. centrifugal casting—CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and the mold is not vented during spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	25 lb/ton. <sup>4</sup> NA—this is considered to be a closed molding operation. 25 lb/ton. <sup>4</sup> Use the appropriate open molding emission limit. <sup>5</sup>
8. centrifugal casting—non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and mold is not vented during the spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	20 lb/ton. <sup>4</sup> NA—this is considered to be a closed molding operation. 20 lb/ton. <sup>4</sup> Use the appropriate open molding emission limit. <sup>5</sup>
9. pultrusion <sup>6</sup>	N/A	reduce total organic HAP emissions by at least 60 weight percent.
10. continuous lamination/casting	N/A	reduce total organic HAP emissions by at least 58.5 weight percent or not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.

<sup>1</sup> Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. The permittee must be at or below these values based on a 12-month rolling average.

<sup>2</sup> This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

<sup>3</sup> If the permittee only applies gel coat with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors. If the permittee uses multiple application methods and any portion of a specific gel coat is applied using nonatomized spray, the permittee may use the nonatomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

<sup>4</sup> For compliance purposes, calculate the emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to Subpart WWW of Part 63, or a site specific emission factor for after the mold is closed as discussed in 40 CFR §63.5796.

<sup>5</sup> Calculate the emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to Subpart WWW of Part 63, or a site specific emission factor as discussed in 40 CFR §63.5796.

<sup>6</sup> Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to Subpart WWW of Part 63.

**Table 4 to Subpart WWW of Part 63 - Work Practice Standards**

As specified in 40 CFR §63.5805, the permittee must meet the work practice standards in the following table that apply to the permittee:

<b>For . . .</b>	<b>The permittee must . . .</b>
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
2. a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.
6. all mixing or BMC manufacturing operations <sup>1</sup>	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.
7. all mixing or BMC manufacturing operations <sup>1</sup>	close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.
8. all mixing or BMC manufacturing operations <sup>1</sup>	keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement	<ul style="list-style-type: none"> <li>i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s),</li> <li>ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device,</li> <li>iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s),</li> <li>iv. direct any compressed air exhausts away from resin and wet-out area(s),</li> <li>v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air,</li> <li>vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and</li> <li>vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.</li> </ul>

<sup>1</sup> Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

**Table 5 to Subpart WWW of Part 63 - Alternative Organic HAP Emissions Limits for Open Molding, Centrifugal Casting, and SMC Manufacturing Operations Where the Standards Are Based on a 95 Percent Reduction Requirement**

As specified in 40 CFR §63.5805, as an alternative to the 95 percent organic HAP emissions reductions requirement, the permittee may meet the appropriate organic HAP emissions limits in the following table:

If the permittee's operation type is . . .	And the permittee uses . . .	The permittee's organic HAP emissions limit is <sup>1</sup> .
1. Open molding—corrosion-resistant and/or high strength (CR/HS)	a. Mechanical resin application	6 lb/ton.
	b. Filament application	9 lb/ton.
	c. Manual resin application	7 lb/ton.
2. Open molding—non-CR/HS	a. mechanical resin application	13 lb/ton.
	b. Filament application	10 lb/ton.
	c. Manual resin application	5 lb/ton.
3. Open molding—tooling	a. Mechanical resin application	13 lb/ton.
	b. Manual resin application	8 lb/ton.
4. Open molding—low flame spread/low smoke products	a. Mechanical resin application	25 lb/ton.
	b. Filament application	14 lb/ton.
	c. Manual resin application	12 lb/ton.
5. Open molding—shrinkage controlled resins	a. Mechanical resin application	18 lb/ton.
	b. Filament application	11 lb/ton.
	c. Manual resin application	9 lb/ton.
6. Open molding—gel coat <sup>2</sup>	a. Tooling gel coating	22 lb/ton.
	b. White/off white pigmented gel coating	22 lb/ton.
	c. All other pigmented gel coating	19 lb/ton.
	d. CR/HS or high performance gel coat	31 lb/ton.
	e. Fire retardant gel coat	43 lb/ton.
	f. Clear production gel coat	27 lb/ton.
7. Centrifugal casting—CR/HS <sup>3 4</sup>	A vent system that moves heated air through the mold	27 lb/ton.
8. Centrifugal casting—non-CR/HS <sup>3 4</sup>	A vent system that moves heated air through the mold	21 lb/ton.
7. Centrifugal casting—CR/HS <sup>3 4</sup>	A vent system that moves ambient air through the mold	2 lb/ton.
8. Centrifugal casting—non-CR/HS <sup>3 4</sup>	A vent system that moves ambient air through the mold	1 lb/ton.
9. SMC Manufacturing	N/A	2.4 lb/ton.

<sup>1</sup> Organic HAP emissions limits for open molding and centrifugal casting expressed as lb/ton are calculated using the equations shown in Table 1 to Subpart WWW of Part 63. The permittee must be at or below these values based on a 12-month rolling average.

<sup>2</sup> These limits are for spray application of gel coat. Manual gel coat application must be included as part of spray gel coat application for compliance purposes using the same organic HAP emissions factor equation and organic HAP emissions limit. If the permittee only applies gel coat with manual application, the permittee shall treat the manually applied gel coat as if it were applied with atomized spray for compliance determinations.

<sup>3</sup> Centrifugal casting operations where the mold is not vented during spinning and cure are considered to be closed molding and are not subject to any emissions limit. Centrifugal casting operations where the mold is not vented during spinning and cure, and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques are considered to be open molding operations and the appropriate open molding emission limits apply.

<sup>4</sup> Centrifugal casting operations where the mold is vented during spinning and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques; use the appropriate centrifugal casting emission limit to determine compliance. Calculate the emission factor using the appropriate centrifugal casting emission factor in Table 1 to Subpart WWW of Part 63, or a site specific emission factor as discussed in 40 CFR §63.5796.

**Table 7 to Subpart WWWW of Part 63 - Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type**

As specified in 40 CFR §63.5810(d), when electing to use the same resin(s) for multiple resin application methods, the permittee may use any resin(s) with an organic HAP content less than or equal to the values shown in the following table, or any combination of resins whose weighted average organic HAP content based on a 12-month rolling average is less than or equal to the values shown the following table:

<b>If the permittee's facility has the following resin type and application method . . .</b>	<b>The highest resin weight is* * * percent organic HAP content, or weighted average weight percent organic HAP content, the permittee can use for . . .</b>	<b>is. . .</b>
1. CR/HS resins, centrifugal casting <sup>1 2</sup>	a. CR/HS mechanical	<sup>3</sup> 48.0
	b. CR/HS filament application	48.0
	c. CR/HS manual	48.0
2. CR/HS resins, nonatomized mechanical	a. CR/HS filament application	46.4
	b. CR/HS manual	46.4
3. CR/HS resins, filament application	CR/HS manual	42.0
4. non-CR/HS resins, filament application	a. non-CR/HS mechanical	<sup>3</sup> 45.0
	b. non-CR/HS manual	45.0
	c. non-CR/HS centrifugal casting <sup>1 2</sup>	45.0
5. non-CR/HS resins, nonatomized mechanical	a. non-CR/HS manual	38.5
	b. non-CR/HS centrifugal casting <sup>1 2</sup>	38.5
6. non-CR/HS resins, centrifugal casting <sup>1 2</sup>	non-CR/HS manual	37.5
7. tooling resins, nonatomized mechanical	tooling manual	91.4
8. tooling resins, manual	tooling atomized mechanical	45.9

<sup>1</sup> If the centrifugal casting operation blows heated air through the molds, then 95 percent capture and control must be used if the facility wishes to use this compliance option.

<sup>2</sup> If the centrifugal casting molds are not vented, the facility may treat the centrifugal casting operations as if they were vented if they wish to use this compliance option.

<sup>3</sup> Nonatomized mechanical application must be used.

**Table 14 to Subpart WWW of Part 63 - Requirements for Reports**

As required in §63.5910(a), (b), (g), and (h), you must submit reports on the schedule shown in the following table:

<b>You must submit a(n)</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
1. Compliance report	a. A statement that there were no deviations during that reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply to you. If there were no periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control as specified in §63.8(c)(7), the report must also contain a statement that there were no periods during which the CMS was out of control during the reporting period	Semiannually according to the requirements in §63.5910(b).
	b. The information in §63.5910(d) if you have a deviation from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If there were periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control, as specified in §63.8(c)(7), the report must contain the information in §63.5910(e)	Semiannually according to the requirements in §63.5910(b).
	c. The information in §63.10(d)(5)(i) if you had a startup, shutdown or malfunction during the reporting period, and you took actions consistent with your startup, shutdown, and malfunction plan	Semiannually according to the requirements in §63.5910(b).
2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. (§63.10(d)(5)(ii)).



**Table 15 to 40 CFR 63 Subpart WWWW - Applicability of General Provisions to Subpart WWWW of Part 63**

<b>The general provisions reference . . .</b>	<b>That addresses . . .</b>	<b>And applies to subpart WWWW of part 63 . . .</b>	<b>Subject to the following additional information . . .</b>
§63.1(a)(1)	General applicability of the general provisions	Yes	Additional terms defined in subpart WWWW of Part 63, when overlap between subparts A and WWWW of Part 63 of this part, subpart WWWW of Part 63 takes precedence.
§63.1(a)(2) through (4)	General applicability of the general provisions	Yes	
§63.1(a)(5)	Reserved	No	
§63.1(a)(6)	General applicability of the general provisions	Yes	
§63.1(a)(7) through (9)	Reserved	No	
§63.1(a)(10) through (14)	General applicability of the general provisions	Yes	
§63.1(b)(1)	Initial applicability determination	Yes	Subpart WWWW of Part 63 clarifies the applicability in §§63.5780 and 63.5785.
§63.1(b)(2)	Reserved	No.	
§63.1(b)(3)	Record of the applicability determination	Yes	
§63.1(c)(1)	Applicability of this part after a relevant standard has been set under this part	Yes	Subpart WWWW of Part 63 clarifies the applicability of each paragraph of subpart A to sources subject to subpart WWWW of Part 63.
§63.1(c)(2)	Title V operating permit requirement	Yes	All major affected sources are required to obtain a title V operating permit. Area sources are not subject to subpart WWWW of Part 63.
§63.1(c)(3) and (4)	Reserved	No	
§63.1(c)(5)	Notification requirements for an area source that increases HAP emissions to major source levels	Yes	
§63.1(d)	Reserved	No	
§63.1(e)	Applicability of permit program before a relevant standard has been set under this part	Yes	
§63.2	Definitions	Yes	Subpart WWWW of Part 63 defines terms in §63.5935. When overlap between subparts A and WWWW of Part 63 occurs, you must comply with the subpart WWWW of Part 63 definitions, which take precedence over the subpart A definitions.
§63.3	Units and abbreviations	Yes	Other units and abbreviations used in subpart WWWW of Part 63 are defined in subpart WWWW of Part 63.
§63.4	Prohibited activities and circumvention	Yes	§63.4(a)(3) through (5) is reserved and does not apply.
§63.5(a)(1) and (2)	Applicability of construction and reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(1)	Relevant standards for new sources upon construction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(2)	Reserved	No	
§63.5(b)(3)	New construction/reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(4)	Construction/reconstruction notification	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(b)(5)	Reserved	No	
§63.5(b)(6)	Equipment addition or process change	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(c)	Reserved	No	
§63.5(d)(1)	General application for approval of construction or reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of Part 63.
§63.5(d)(2)	Application for approval of construction	Yes	
§63.5(d)(3)	Application for approval of reconstruction	No	
§63.5(d)(4)	Additional information	Yes	

<b>The general provisions reference . . .</b>	<b>That addresses . . .</b>	<b>And applies to subpart WWW of part 63 . . .</b>	<b>Subject to the following additional information . . .</b>
§63.5(e)(1) through (5)	Approval of construction or reconstruction	Yes	
§63.5(f)(1) and (2)	Approval of construction or reconstruction based on prior State preconstruction review	Yes	
§63.6(a)(1)	Applicability of compliance with standards and maintenance requirements	Yes	
§63.6(a)(2)	Applicability of area sources that increase HAP emissions to become major sources	Yes	
§63.6(b)(1) through (5)	Compliance dates for new and reconstructed sources	Yes	Subpart WWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(b)(6)	Reserved	No	
§63.6(b)(7)	Compliance dates for new operations or equipment that cause an area source to become a major source	Yes	New operations at an existing facility are not subject to new source standards.
§63.6(c)(1) and (2)	Compliance dates for existing sources	Yes	Subpart WWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(c)(3) and (4)	Reserved	No	
§63.6(c)(5)	Compliance dates for existing area sources that become major	Yes	Subpart WWW of Part 63 clarifies compliance dates in §63.5800.
§63.6(d)	Reserved	No	
§63.6(e)(1) and (2)	Operation & maintenance requirements	Yes	
§63.6(e)(3)	Startup, shutdown, and malfunction plan and recordkeeping	Yes	Subpart WWW of Part 63 requires a startup, shutdown, and malfunction plan only for sources using add-on controls.
§63.6(f)(1)	Compliance except during periods of startup, shutdown, and malfunction	No	Subpart WWW of Part 63 requires compliance during periods of startup, shutdown, and malfunction, except startup, shutdown, and malfunctions for sources using add-on controls.
§63.6(f)(2) and (3)	Methods for determining compliance	Yes	
§63.6(g)(1) through (3)	Alternative standard	Yes	
§63.6(h)	Opacity and visible emission Standards	No	Subpart WWW of Part 63 does not contain opacity or visible emission standards.
§63.6(i)(1) through (14)	Compliance extensions	Yes	
§63.6(i)(15)	Reserved	No	
§63.6(i)(16)	Compliance extensions	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)	Applicability of performance testing requirements	Yes	
§63.7(a)(2)	Performance test dates	No	Subpart WWW of Part 63 initial compliance requirements are in §63.5840.
§63.7(a)(3)	CAA Section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification rescheduled performance test	Yes	
§63.7(c)	Quality assurance program, including test plan	Yes	Except that the test plan must be submitted with the notification of the performance test.
§63.7(d)	Performance testing facilities	Yes	
§63.7(e)	Conditions for conducting performance tests	Yes	Performance test requirements are contained in §63.5850. Additional requirements for conducting performance tests for continuous lamination/casting are included in §63.5870.
§63.7(f)	Use of alternative test method	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of performance tests	Yes	
§63.8(a)(1) and (2)	Applicability of monitoring requirements	Yes	

<b>The general provisions reference . . .</b>	<b>That addresses . . .</b>	<b>And applies to subpart WWW of part 63 . . .</b>	<b>Subject to the following additional information . . .</b>
§63.8(a)(3)	Reserved	No	
§63.8(a)(4)	Monitoring requirements when using flares	Yes	
§63.8(b)(1)	Conduct of monitoring exceptions	Yes	
§63.8(b)(2) and (3)	Multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)	Compliance with CMS operation and maintenance requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(2) and (3)	Monitoring system installation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(4)	CMS requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(5)	Continuous Opacity Monitoring System (COMS) minimum procedures	No	Subpart WWW of Part 63 does not contain opacity standards.
§63.8(c)(6) through (8)	CMS calibration and periods CMS is out of control	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(d)	CMS quality control program, including test plan and all previous versions	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(1)	Performance evaluation of CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(2)	Notification of performance evaluation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(3) and (4)	CMS requirements/alternatives	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(5)(i)	Reporting performance evaluation results	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(5)(ii)	Results of COMS performance evaluation	No	Subpart WWW of Part 63 does not contain opacity standards.
§63.8(f)(1) through (3)	Use of an alternative monitoring method	Yes	
§63.8(f)(4)	Request to use an alternative monitoring method	Yes	
§63.8(f)(5)	Approval of request to use an alternative monitoring method	Yes	
§63.8(f)(6)	Request for alternative to relative accuracy test and associated records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(g)(1) through (5)	Data reduction	Yes	
§63.9(a)(1) through (4)	Notification requirements and general information	Yes	
§63.9(b)(1)	Initial notification applicability	Yes	
§63.9(b)(2)	Notification for affected source with initial startup before effective date of standard	Yes	
§63.9(b)(3)	Reserved	No	
§63.9(b)(4)(i)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	
§63.9(b)(4)(ii) through (iv)	Reserved	No	
§63.9(b)(4)(v)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	Existing facilities do not become reconstructed under subpart WWW of Part 63.
§63.9(b)(5)	Notification that you are subject to this subpart for new or reconstructed affected source with initial startup after effective date and for which an application for approval of construction or reconstruction is not required	Yes	Existing facilities do not become reconstructed under subpart WWW of Part 63.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special compliance requirements for new source	Yes	

<b>The general provisions reference . . .</b>	<b>That addresses . . .</b>	<b>And applies to subpart WWW of part 63 . . .</b>	<b>Subject to the following additional information . . .</b>
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of opacity and visible emissions observations	No	Subpart WWW of Part 63 does not contain opacity or visible emission standards.
§63.9(g)(1)	Additional notification requirements for sources using CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(g)(2)	Notification of compliance with opacity emission standard	No	Subpart WWW of Part 63 does not contain opacity emission standards.
§63.9(g)(3)	Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(h)(1) through (3)	Notification of compliance status	Yes	
§63.9(h)(4)	Reserved	No	
§63.9(h)(5) and (6)	Notification of compliance status	Yes	
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in information provided	Yes	
§63.10(a)	Applicability of recordkeeping and reporting	Yes	
§63.10(b)(1)	Records retention	Yes	
§63.10(b)(2)(i) through (v)	Records related to startup, shutdown, and malfunction	Yes	Only applies to facilities that use an add-on control device.
§63.10(b)(2)(vi) through (xi)	CMS records, data on performance tests, CMS performance evaluations, measurements necessary to determine conditions of performance tests, and performance evaluations	Yes	
§63.10(b)(2)(xii)	Record of waiver of recordkeeping and reporting	Yes	
§63.10(b)(2)(xiii)	Record for alternative to the relative accuracy test	Yes	
§63.10(b)(2)(xiv)	Records supporting initial notification and notification of compliance status	Yes	
§63.10(b)(3)	Records for applicability determinations	Yes	
§63.10(c)(1)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(2) through (4)	Reserved	No	
§63.10(c)(5) through (8)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(9)	Reserved	No	
§63.10(c)(10) through (15)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(d)(1)	General reporting requirements	Yes	
§63.10(d)(2)	Report of performance test results	Yes	
§63.10(d)(3)	Reporting results of opacity or visible emission observations	No	Subpart WWW of Part 63 does not contain opacity or visible emission standards.
§63.10(d)(4)	Progress reports as part of extension of compliance	Yes	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes	Only applies if you use an add-on control device.

The general provisions reference . . .	That addresses . . .	And applies to subpart WWW of part 63 . . .	Subject to the following additional information . . .
§63.10(e) (1) through (3)	Additional reporting requirements for CMS	Yes	This section applies if you have an add-on control device and elect to use a CEM to demonstrate continuous compliance with an emission limit.
§63.10(e) (4)	Reporting COMS data	No	Subpart WWW of Part 63 does not contain opacity standards.
§63.10(f)	Waiver for recordkeeping or reporting	Yes	
§63.11	Control device requirements	Yes	Only applies if you elect to use a flare as a control device.
§63.12	State authority and delegations	Yes	
§63.13	Addresses of State air pollution control agencies and EPA Regional Offices	Yes	
§63.14	Incorporations by reference	Yes	
§63.15	Availability of information and confidentiality	Yes	

STATE OF TENNESSEE  
AIR POLLUTION CONTROL BOARD  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: **TBD**

Permit Number

Date Expires: **TBD**

974647

Facility ID: 53-0090

Issued To:  
Hubbell-Lenoir City, Inc.

Installation Address  
2911 Industrial Park Drive  
Lenoir City

Installation Description  
02 – Continuous Mixers and Aggregate Transfer (S-53, -62, -63, -64)

Emission Source Reference No.  
53-0090-02

03 – Batch Mixing and Casting (S-1 thru S-51)

53-0090-03

T5

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Comprehensive Rules and Regulations (Tenn. Comp. R. & Regs.).

General Conditions

- G1.** The applications that were utilized in the preparation of this permit are dated June 1, 2016 and April 10, 2017, and are signed by Scott D. Martz, Business Unit Director for the permitted facility. If this person terminates their employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

**POST AT INSTALLATION ADDRESS**

**G2. Visible and Fugitive Emissions**

- A. Visible emissions from this facility not covered by Condition **S2-5A** shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

Tenn. Comp. R. & Regs. 1200-03-05-.01(1) and 1200-03-05-.03(6)

- B. 1) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
- (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
  - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
  - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

2) No person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Tenn. Comp. R. & Regs. 1200-03-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

Tenn. Comp. R. & Regs. 1200-03-08-.01(1) and 1200-03-08-.01(2)

- C. Visible emissions from roads and parking areas shall not exhibit greater than ten percent (10%) opacity utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

Tenn. Comp. R. & Regs. 1200-03-08-.03

**G3. Reserved****G4. Routine Maintenance Requirements**

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two (2) years. The date each maintenance and repair activity began shall be entered in the log no later than thirty (30) days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than thirty (30) days from activity completion.

**G5. General Recordkeeping Requirements**

A. The following recordkeeping requirements shall apply to this facility:

- 1) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than thirty (30) days from the end of the month for which the data is required.
- 2) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the week for which the data is required.
- 3) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.
- 4) All maintenance activities required by **Condition G4** (including any ongoing maintenance that has not been completed) shall be entered in the maintenance log no later than thirty (30) days following the start of the maintenance.

B. Logs and records specified in this permit shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative and shall be retained for a period of not less than five (5) years unless otherwise noted. Logs and records contained in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same or equivalent information that is required. Computer-generated logs are also acceptable.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

**G6. Other State and Federal Regulations**

This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, all applicable provisions of the Tennessee Air Pollution Control Comprehensive Rules and Regulations, federal regulations published under 40 CFR 61 and 40 CFR 63 for sources of hazardous air pollutants, and federal regulations published under 40 CFR 60, New Source Performance Standards.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

**G7. Startup, Shutdown, and Malfunction Requirements**

A. The facility must take all reasonable measures to keep emissions to a minimum during source startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Tenn. Comp. R. & Regs. 1200-03-20-.02(1)

B. **Monitoring Systems:** Due allowance for failure to monitor shall be made during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Technical Secretary, that the malfunction was unavoidable and is being repaired as expeditiously as practicable, and that a log of all such malfunctions is being kept by the owner or operator, including the time the malfunction began, when it was detected, what was wrong, what was done to correct the malfunction, and when the malfunction was corrected. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Tenn. Comp. R. & Regs. 1200-03-10-.02(e)

**G8. Excursions**



All excursions from indicated parameter limits or ranges shall be recorded in a permanent suitable format and retained at the source location for a period of not less than two (2) years.

The record of excursions shall include, at a minimum, the time the excursion was discovered, the corrective action taken, and the time that the process was back within the normal operating range.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

“Excursion” shall mean a departure from an indicator range established for monitoring, consistent with any averaging period specified for averaging the results of the monitoring.

**G9. Application and Agreement Letters**

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application referenced in Condition G1, and any documented agreements made with the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(d)

**G10. Permit Transference**

- A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location.

Tenn. Comp. R. & Regs. 1200-03-09-.03(6)(b)

- B. In the event an ownership change occurs at this facility, written notification of the ownership change requesting a permit amendment must be submitted to the Technical Secretary no later than thirty (30) days after the change occurs. This notification must include an agreement to abide by the terms of the permit, Division 1200-03 and Division 0400-30 of the Tennessee Comprehensive Rules and Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.03(6)(a)

**G11. Reserved**

**G12. Reserved**

**G13. Reserved**

**G14. Reserved**

**G15. Reserved**

**G16. Recordkeeping**

- A. A daily log of operating hours and material usage shall be maintained in the format specified below in Table G16A or an alternative format which readily provides the same information. A separate log shall be kept for each source (53-0090-02 and 53-0090-03) to keep the logs specified in **Conditions S1-1A and S2-1A**. These logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years. **All data, including all required calculations, must be entered in the log no later than seven (7) days from the end of the day for which the data is required.**

**Table G16A DAILY MATERIAL THROUGHPUT LOG FOR:  
SOURCES 53-0090-02, -03**

DATE (MM/DD/YYYY)	Throughput (lbs)	# of Hours Operated (hr)	Daily Average Throughput (lbs/hr)
TOTALS			

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a), 1200-03-10-.04(2)(b) and 1200-03-09-.02(11)(e)1.(iii)

- B. VOC (non-styrene) and HAP emissions shall be calculated and recorded in the following logs to demonstrate compliance with the permit conditions. A monthly log of material usage, VOC content, Styrene content, HAP content, VOC (non-styrene) emissions, Styrene emissions, and HAP emissions shall be maintained in the format specified in **Table G16B1** below, or an alternative formats which readily provides the same information. Separate logs shall be kept for each source (53-0090-02 and 53-0090-03) to keep the logs specified in **Conditions S1-4B, S1-4C, S2-4B, and S2-4C**. These logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five (5) years. **All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required.**

**Table G16B1: MONTHLY VOC AND HAP EMISSIONS LOG FOR:  
SOURCES 53-0090-02 and -03**

MONTH/YEAR: \_\_\_\_/\_\_\_\_/\_\_\_\_

Material Name	Usage (gallons per month)	VOC Content (pounds VOC per gallon)	VOC (non-styrene) Emissions (tons VOC per month)	HAP <sub>1</sub> (Styrene) Content (pounds per gallon)	HAP <sub>1</sub> (Styrene) Emission Factor (*) (lb/lb)	HAP <sub>1</sub> (Styrene) Emissions (tons per month)	HAP <sub>p</sub> Content (pounds HAP <sub>p</sub> per gallon)	HAP <sub>p</sub> Emission Factor (*) (lb/lb)	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per month)	Total HAP Emissions (tons HAP <sub>1</sub> thru. HAP <sub>n</sub> per month)
Material <sub>i</sub>										
Total										

(\*) The HAP emission factor is:

- Styrene and other HAP from resin used in polymer casting: 0.015 lb Styrene emitted per pound of Styrene used; in the batch mixing and casting process, approved by the Division in a letter dated March 22, 2018.
- Styrene and other HAP from gelcoat used to form molds in conjunction with polymer casting: the appropriate emission factor (1f, 1g, or 1h from Table 1 in Attachment 2 of this permit).
- Styrene and other HAP from other operations using thermoset resins or gelcoats containing styrene: the appropriate emission factor from Table 1 in Attachment 2 of this permit.
- Site specific emission factor: In lieu of an emission factor calculated using the equations in Table 1 in Attachment 2 of this permit, the permittee may elect to use a site-specific organic HAP emissions factor based on actual facility HAP emissions test data. The emissions test must be conducted and data reduced in accordance with a test protocol approved in advance by the Technical Secretary. At least 30 days prior to conducting the emissions test, the Technical Secretary shall be given notice in order to afford him the opportunity to have an observer present. To use the site-specific organic HAP emissions factor, the permittee shall furnish the Technical Secretary a written report of the results of the emissions test for approval, and request the appropriate permit amendment or modification incorporating the site-specific organic HAP emissions factor after approval of the emissions test report. Upon approval of the emissions test report, the site-specific organic HAP emissions factor will be incorporated in this permit through the appropriate permit amendment or modification.

#### EQUATIONS FOR THE VOC/HAP EMISSIONS LOG CALCULATIONS:

- Material<sub>i</sub> VOC Emissions (tons VOC per month)  
= (Material<sub>i</sub> Usage (gpm)) (Material<sub>i</sub> VOC Content (lb VOC per gallon)) / (2000 lb/ton)
- Material<sub>i</sub> HAP<sub>1</sub> (Styrene) Emissions (tons styrene per month)  
= (Material<sub>i</sub> Usage (gpm))(Material<sub>i</sub> Styrene Contents (lb styrene per gallon))(Material<sub>i</sub> Styrene Emission Factor (lb styrene emitted per lb styrene used))  
(2000 lb/ton)
- Material<sub>i</sub> HAP<sub>p</sub> Emissions (tons HAP<sub>p</sub> per month)  
= (Material<sub>i</sub> Usage (gpm))(Material<sub>i</sub> HAP<sub>p</sub> Contents (lb HAP<sub>p</sub> per gallon))/(2000 lb/ton)

Where:  $i = 1, 2, 3, \dots, k$  = the number of different Materials;  
 $p = 1, 2, 3, \dots, n$  = the number of different hazardous air pollutants

An annual VOC and HAP emissions log shall be maintained in the format specified in **Table G16B2** below, or an alternative format which readily provides the same information. Separate logs shall be kept for each source (53-0090-02 and 53-0090-03) to keep the logs specified in **Conditions S1-4B, S1-4C, S2-4B, and S2-4C**. These logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five (5) years. **All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required.**

**Table G16B2: 12-CONSECUTIVE MONTHS VOC AND HAP EMISSIONS LOG FOR:  
 SOURCES 53-0090-02 and -03**

Month and Year	VOC Emissions (tons per month)	VOC Emissions (tons per 12 months *)	HAP <sub>i</sub> (Styrene) Emissions (tons per month)	HAP <sub>i</sub> (Styrene) Emissions (tons per 12 month *)s	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per month)	HAP <sub>p</sub> Emissions (tons HAP <sub>p</sub> per 12 months *)	Total HAP Emissions (tons HAP <sub>1</sub> thru. HAP <sub>n</sub> per month)	Total HAP Emissions (tons HAP <sub>1</sub> thru. HAP <sub>n</sub> per 12 months *)

(\*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months]. This log is the total amount of VOCs and HAPs emitted to the air on a 12 month consecutive basis.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a), 1200-03-10-.04(2)(b) and 1200-03-09-.02(11)(e)1.(iii)

Source Specific Conditions for Source 53-0090-02 Continuous Mixers and Aggregate Transfer (S-53, S-62, S-63, and S-64)

### S1-1. Input Limitation(s)

- A. The total input capacity for this source shall not exceed 58,450 pounds per hour (lb/hr) on a daily average basis.

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(d) and the application with date April 10, 2017

Compliance Method: A daily log containing the operating hours and material throughput shall be maintained in the format specified in **Table G16A** above, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

### S1-2. Production Limitation(s)

- A. The maximum production for S-53 mixing process shall not exceed 1,500,000 pounds Maximum Annual Resin Usage and 10,000,000 pounds Maximum Production during any period of 12 consecutive months.

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(d) and the application with date April 10, 2017

Compliance Method: A log of resin usage and production for S-53 shall be maintained in the format specified in Table S1-2A below, or an alternative format that readily shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the month for which the data is required.

**Table S1-2A**  
**Monthly and 12-Months Resin Usage and Production for S-53**

Month and year	Resin Usage (lbs)	Resin Usage (lbs per 12 months)	Production (lbs)	Production (lbs per 12 months)

(\*) The Pounds per 12 Month value is the sum of the Resin Usage (or Production) in the 11 months preceding the month just completed + the Resin Usage (or Production) in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for pounds per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 pounds in 2 months]. This log is the total amount of Resin Usage (or Production) on a 12 month consecutive basis.

### S1-3. Reserved

**S1-4. Emission Limitations**

- A. Particulate matter (PM) emitted from this source shall not exceed 0.02 grain per dry standard cubic foot (1.7 lb/hr) of exhaust gases.

Tenn. Comp. R. & Regs. 1200-03-07-.04(1) and the application with date April 10, 2017

Compliance method: Compliance with this requirement shall be assured by maintaining a minimum pressure drop of 0.2 inches of water across the baghouse. The pressure drop for the baghouse shall be recorded once daily when the source is in operation. The days when the source does not operate shall be noted.

For lower pressure drop reading(s) resulting from replacement of bags, the permittee shall record the deviation(s) as such in their daily records. Due allowance will be made for lower pressure drop reading(s) which follow replacement of bags provided the permittee establishes to the satisfaction of the Technical Secretary that these lower readings resulted from the replacement of bags.

Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and made readily available for inspection by the Technical Secretary or representative. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required. These records must be retained for a period of not less than five (5) years.

All data, including all required calculations, must be entered into the log below, or an alternative format that shows the information required to determine compliance, no later than seven (7) days from the end of the day for which the data is required.

**Daily Log of Pressure Drop for Baghouse A7      Month/Year: \_\_\_\_\_**

Day	Pressure Drop (in. H <sub>2</sub> O)
1	
2	
...	
31	

- B. Volatile organic compounds (VOC) emitted from this source shall not exceed 14.1 tons during any period of twelve (12) consecutive months. (This includes the styrene emissions limited by **Condition S1-4.C**)

Tenn. Comp. R. & Regs. 1200-03-07-.07(2) and the application with date April 10, 2017

Compliance Method: Compliance with this permit condition shall be assured by maintaining the records specified in **Condition G-16B** including Tables **G-16B1** and **G-16B2**, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- C. Styrene emitted from this source shall not exceed 10.3 tons during any period of twelve (12) consecutive months.

Tenn. Comp. R. & Regs. 1200-03-07-.07(2), 1200-03-09-.03(8) and the application with date April 10, 2017

Compliance Method: Compliance with this permit condition shall be assured by maintaining the records specified in **Condition G-16B** including Tables **G-16B1** and **G-16B2**, or records in an alternative format that

readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

**S1-5. Reserved**

**S1-6. Reserved**

Source Specific Conditions for Source 53-0090-03 Batch Mixing and Casting (S-1 through S-51) with No Emission Control

**S2-1. Input Limitation(s)**

- A. The input capacity for this source shall not exceed 16,026 pounds per hour (lb/hr) on a daily average basis.

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(d) and the application with date April 10, 2017

Compliance Method: A daily log containing the operating hours and material throughput shall be maintained in the format specified in **Table G16A** above, or an alternative format that shows the information required to determine compliance. The log shall be recorded in a suitable permanent form and kept available for inspection by the Technical Secretary or his/her representative. Records shall be retained for a period of not less than five years. All data, including all required calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.

**S2-2. Reserved**

**S2-3. Reserved**

**S2-4. Emission Limitations**

- A. Particulate matter (PM) emitted from this source shall not exceed 0.004 grains per dry standard cubic foot (5.14 lb/hr or 22.5 tons/yr).

Tenn. Comp. R. & Regs. 1200-03-07-.04(1) and the agreement letter with date August 7, 2018

Compliance method: This is a multi-stations manual mixing and casting process line inside the facility without exhaust control. The building acts as a settling chamber with the assumption of 50% of the particulate settled inside the facility building. Compliance with this condition can be assured by compliance with **Conditions S2-1.A and S2-5.A.**

- B. Volatile organic compounds (VOC) emitted from this source shall not exceed 157.3 tons during all intervals of any 12 consecutive months (This includes the styrene emissions limited by **Condition S2-4.C**).

Tenn. Comp. R. & Regs. 1200-03-07-.07(2) and the application with date April 10, 2017

Compliance Method: Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

- C. Styrene emitted from this source shall not exceed 103 tons during any period of twelve (12) consecutive months.

Tenn. Comp. R. & Regs. 1200-03-07-.07(2), 1200-03-09-.03(8) and the application with date April 10, 2017

Compliance Method: Compliance with this permit condition shall be assured by maintaining the records specified in **Condition E3-12** including Tables E3-12A and E3-12B, or records in an alternative format that readily show the information required to determine compliance. The logs shall be recorded in a suitable permanent form and kept available for inspection. Records shall be retained for a period of not less than five years.

#### **S2-5. Source-Specific Visible Emission Limitation(s)**

- A. Visible Emissions from this source shall not exhibit greater than ten percent (10%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

Tenn. Comp. R. & Regs. 1200-03-05-.01(3) and the agreement letter dated August 7, 2018

Compliance method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996, and amended September 11, 2013, that is enclosed as Attachment 1.

#### **S2-6. Reserved**

(end of conditions)

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The permit application gives the location of this source as 35.784723° Latitude and -84.266356° Longitude.



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**ATTACHMENT 1**

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**OPACITY MATRIX DECISION TREE for  
VISIBLE EMISSION EVALUATION METHOD 9,  
dated JUNE 18, 1996, amended SEPTEMBER 11, 2013**

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## **Decision Tree PM for Opacity for Sources Utilizing EPA Method 9\***

### Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring – Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.\*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

### Typical Pollutants

Particulates, VOC, CO, SO<sub>2</sub>, NO<sub>x</sub>, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

### Reader Error

EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards:

The TAPCD guidance is to declare non-compliance when the highest six-minute average\*\* exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

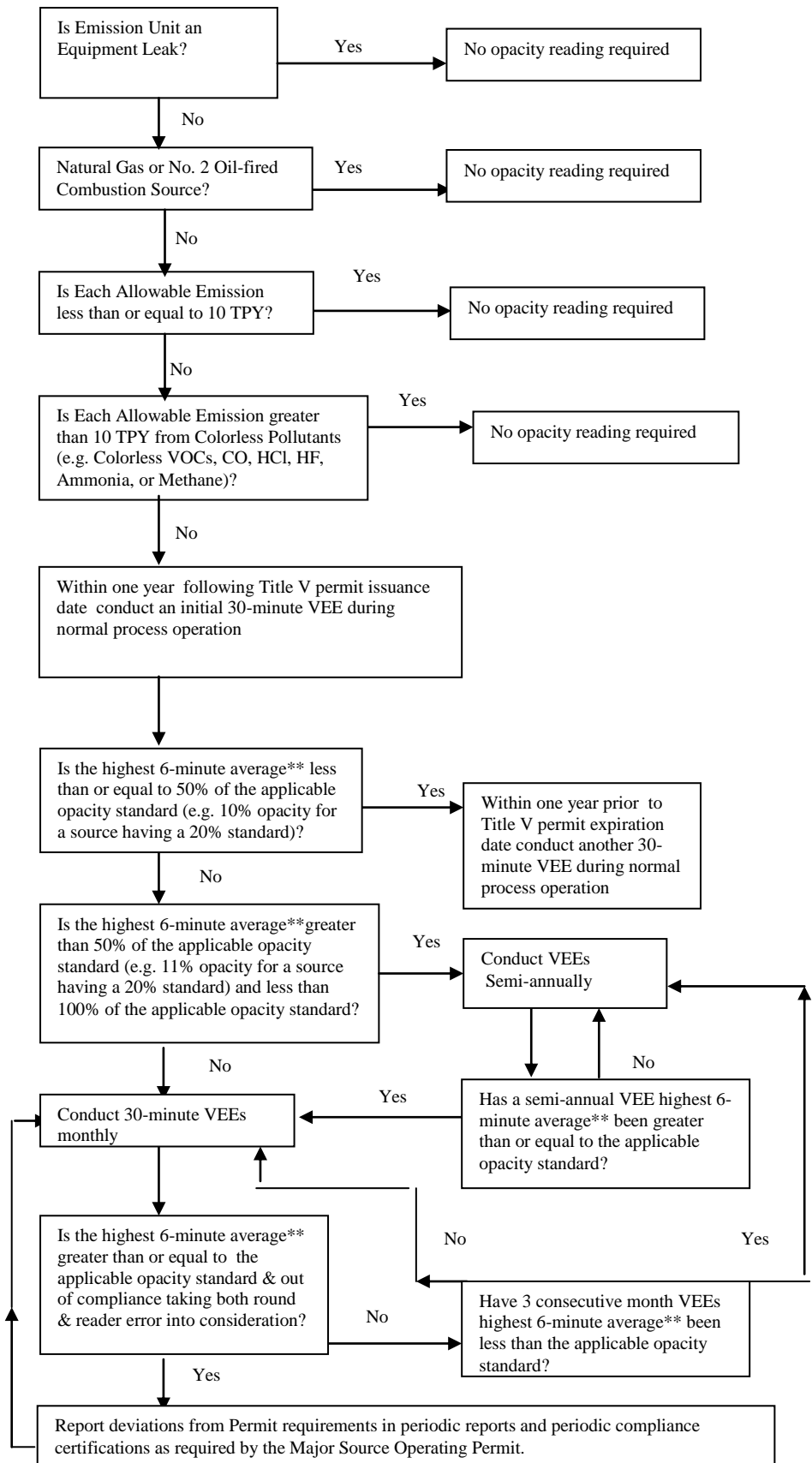
EPA Method 9, NSPS or NESHAPS stipulate opacity standards:

EPA guidance is to allow only engineering round. No allowance for reader error is given.

\*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

\*\*Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996  
Amended September 11, 2013



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## ATTACHMENT 2

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### **Table 1 - Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams**

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Table 1--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

Use the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	And you use...	With...	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) 234	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) 234
1. open molding operation	a. manual resin application	i. nonvapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll out	$EF = 0.126 \times \%HAP \times 2000 \times 0.8$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.8$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = (0.126 \times \%HAP \times 2000 \times 0.5$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.5$
	b. atomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.55$
	c. nonatomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. closed-mold curing with roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$
	d. atomized mechanical resin application with robotic or automated spray control <sup>9</sup>	nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times 0.77$	$EF = 0.77 \times ((0.714 \times \%HAP) - 0.18) \times 2000$
	e. filament application <sup>6</sup>	i. nonvapor-suppressed resin	$EF = 0.184 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.12 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000 \times 0.65$
	f. atomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000$



	g. nonatomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.185 \times \%HAP \times 2000$	$EF = ((0.4506 \times \%HAP) - 0.0505) \times 2000$
	h. atomized spray gel coat application using robotic or automated spray	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000 \times 0.73$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000 \times 0.73$
2. centrifugal casting operations <sup>78</sup>	a. heated air blown through molds	nonvapor-suppressed resin	$EF = 0.558 \times (\%HAP) \times 2000$	$EF = 0.558 \times (\%HAP) \times 2000$
	b. vented molds, but air vented through the molds is not heated	nonvapor-suppressed resin	$EF = 0.026 \times (\%HAP) \times 2000$	$EF = 0.026 \times (\%HAP) \times 2000$

**Footnotes to Table 1**

<sup>1</sup> The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in this permit. These equations may not be the most appropriate method to calculate emission estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other than rule compliance if these equations are the most accurate available.

<sup>2</sup> To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of §63.5810. The organic HAP emissions factors have units of lbs of organic HAP per ton of resin or gel coat applied.

<sup>3</sup> Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e., 33 percent HAP should be input as 0.33, not 33.

<sup>4</sup> The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.

<sup>5</sup> This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.

<sup>6</sup> Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.

<sup>7</sup> These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.

<sup>8</sup> If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.